



WAFFE AUSRÜSTUNG



des Zweiten Weltkriegs



EQUIPMENT AVAILABILITY
TIME-LINE



COMPILED AND EDITED BY
Peter Frederick Model



Forward (*Führen*)

This Equipment Data document is designed to allow players to determine the equipment they can field, based on introduction dates, retirement dates and production numbers. This document is a guide and is not intended to be comprehensively accurate, many dates and production number sources are suspect or estimates.

Rules (*Regeln*)

This document has been created to assist players who are refighting land conflicts, in this case world war two. The rules this document is intended to support is Korps Commander & Lighting War Red Storm, as well as the modified/updated version of these rules, Korps-Kommandeur and Bewegungskrieg. There is no reason why this would not also use useful for any other similar scaled rules, such as Spearhead, Fist Full of TOWs and Panzer Korps.

Versions (*Versionen*)

For those using these reprinted rules, the “major” version numbering used determines how much modifications are represent in the rules document, the key is as follows;

Original Rules with a date: The original, most recent, rules as posted on the internet or available in print. If available in print, only rules which are no longer commercially available are included in any reprinting.

Rules v1.x: Reformatted version of the original rules, **with errata and extra “official” rules included. Also included are any corrections, additional numbering, updated tables, and additional cross referencing.** There are no changes to the original rules.

Rules v2.x: Enhanced version of the original rules, with errata and extra “official” rules included. Also included are any corrections, additional numbering, updated tables, and additional cross referencing. **Includes optional rules, such as terrain, such as weather, set-up or any other rules which fill gaps in the original rules. This version of the rules includes additional diagrams, figures and commentary.** The original rules are unchanged, but additional rules have been added to fill any gaps.

Rules v3.x: Expanded version of the original rules, with errata and extra “official” rules included. Also included are any corrections, additional numbering, updated tables, and additional cross referencing. Includes optional rules, such as terrain, such as weather, set-up or any other rules which fill gaps in the original rules. This version of the rules includes additional diagrams, figures and commentary. **The original rules are modified and reorganized, retaining original objective but offering addition detail or simplification of play.** The original rules have been changed.

Structure (*Struktur*)

The rules set consists of a number of Parts, these are as follows;

- Part 0: GUIDE – User Guide: To be used to assist players in learning the rules. (1 column)
- Part 1: RULES – User Reference: To be used when playing the game (2 column).
- Part 2: BASIC ORGANISATION – Army Lists (Gliederungen)
- Part 3: EQUIPMENT DATA CHARTS – Equipment Lists (Ausrüstung)
- Part 4: QRS / REFERENCE – Quick Reference Sheets and Rules (3 column) / (Kurzübersicht)
- Part 5: EXAMPLES – Examples of Play. (Beispiele)
- Part 6: DESIGNERS NOTES – Designer Notes, commentary and overview of the Rules.
- Part 7: SCENARIO’S – Scenarios (Kampagnen)
- Part 9: THESAURUS - Player Thesaurus: To use used to find rules and related rules.

OVERVIEW

OVERVIEW

This document is designed to be used in conjunction with the Part 3: EQUIPMENT DATA CHARTS publications for the Corps Commander set of rules (Corps Commander, Korps Commander & Korps-Kommandeur) and the LWRS set of rules (Bewegungskrieg). Players can determine the likelihood of a specific weapon being available in a given period, allowing players to field historically typical forces.

CAVEAT

While equipment availability or introduction dates are reasonable accurate, it should be noted that these official dates may differ from reality. Some weapons were introduced in very small numbers, later to be produced in greater numbers, thus while available, a weapon may not be common. In other cases the weapon may be introduced in the home country but may take a reasonable time to arrive on the battlefield, this was very common with the Americans. Finally, a weapon may be available but the commander decided not to use it, such as what occurred with the T-44.

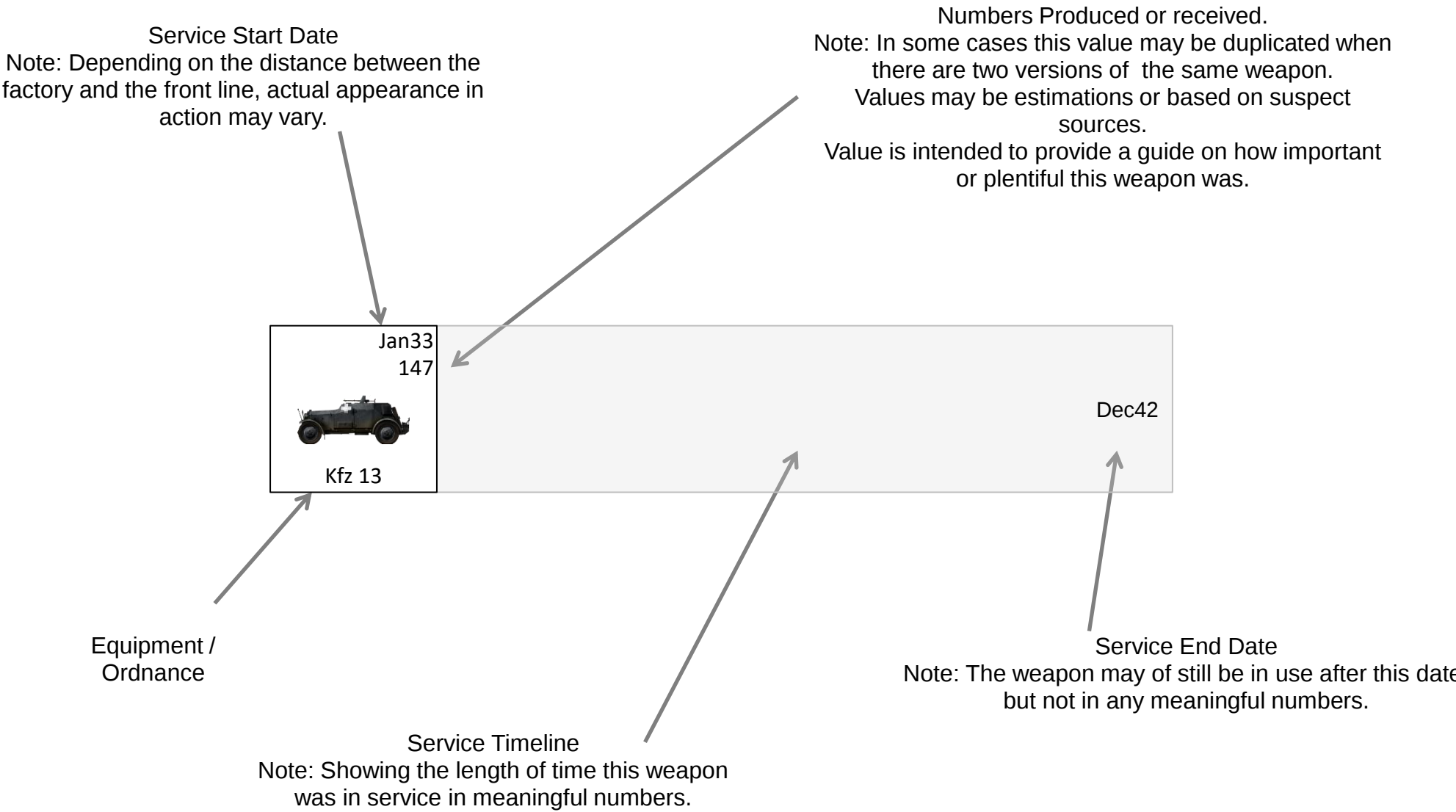
The end of service data is even more variable, the dates given are sometimes official dates a weapon was withdrawn from service, such as what occurred with the M6 GMC, or the German Pzkwf I and II. In other cases it represents a date when a weapon was converted to a superior weapon, which is what occurred with the 3.7 cm Pzkwf III's. In these cases the end of service date is reasonably clean. On the other hand some end of services dates represents when most of the weapon was destroyed. It possible examples of that weapon may have continued past this date. For example, the Allied conquest of France and the Russian invasion of Belorussia destroyed most of the German stock of many older weapons, leaving only the later weapons in late 1944 and 1945.

If players have historical Equipment lists for a specific formation, they should use that. Many of the historical scenarios will contain equipment not available according to this document.

KEY

Ordnance (Equipment) Time Line

Key:



AMERICAN VEHICLES & ARTILLERY

GENERAL

While the war between 1939 and the end of 1941 the Americans had been observing the effect of different weapons and made appropriate preparations. The result was the Americans had a wide range of good weapons available for mass production. The Artillery was excellent, especially the 155 mm long tom. The only issue the Americans had was adopting a number of doctrines which was less than effective, the classic one was the lack of a good LMG. Other's included the concept of tank destroyers which went out looking for enemy tanks which resulted in weapons such as the M6 GMC, a 37mm a/t gun mounted on a jeep. This proved to be useless. The other issue was they based many weapons on experiences on the western front, so the M4 MT, which was a good tank by British standards, was less than useful against the tanks the Germans developed to counter the Russians. This was excusable, as after all even the Germans were caught out when they invaded Russia.

TANKS

The American tanks were good by British standards and even pre-mid 1943 German standards. The only issue was the main gun, which while a 75mm, was not a long barrel weapon. The British 6-pounder was superior in an a/t role, although the 75mm was excellent when facing infantry. However, when the Americans landed in France in 1944 the German armour had improved to a massive extent and compared to the Panther the M4 MT was second rate. Even against the Pzkw IV it had major problems. Luckily for the Americans the early battles were all at close range, but they suffered badly. The 3-inch armed M4 was rushed out which allowed them to match the Pzkw IV, but was still no match for the Panther. The M26 was a tank which could match anything the Germans had, but it arrived late and in small numbers.

TANK DESTROYERS

The Americans developed a tank destroyer doctrine which saw these lightly armoured weapons seek enemy armour and destroy it. The doctrine was flawed as these weapons were easy picking for any enemy anti-tank gun, but in a defensive role provided to be very effective. The M36 GMC was particularly a useful weapons, with its 90mm gun it would take on even the tiger 2.

ARTILLERY

The American artillery was modern and excellent. Good range, good rate of fire and reasonably mobile. The anti-tank artillery was the only weak spot, with the 37mm A/T gun being totally outclassed by 1943. The Americans used a US manufactured 6-pounder, which provided to be effective. They also developed a 3-inch a/t gun, which was very good but was too large and heavy.

American Scout Cars & Armoured Cars

Pre-War Light Tanks

Overview

The americans had three vehicles, the M3 SC was initially used in all roles but its lack of overall protection resulted in the M20 SC, which served as the combat reconnaissance vehicle., and the lack of a heavy weapon resulted in the M8, which also served in combat reconnaissance roles.

Jan39 20918  M3A1 SC				May45	
Feb42 8523  M8 AC					May45
Mar43 3791  M20 SC					May45

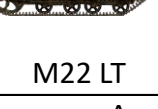
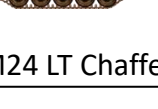
Dec38 73  M2A3 LT	Aug40	
May40 375  M2A4 LT	May41	

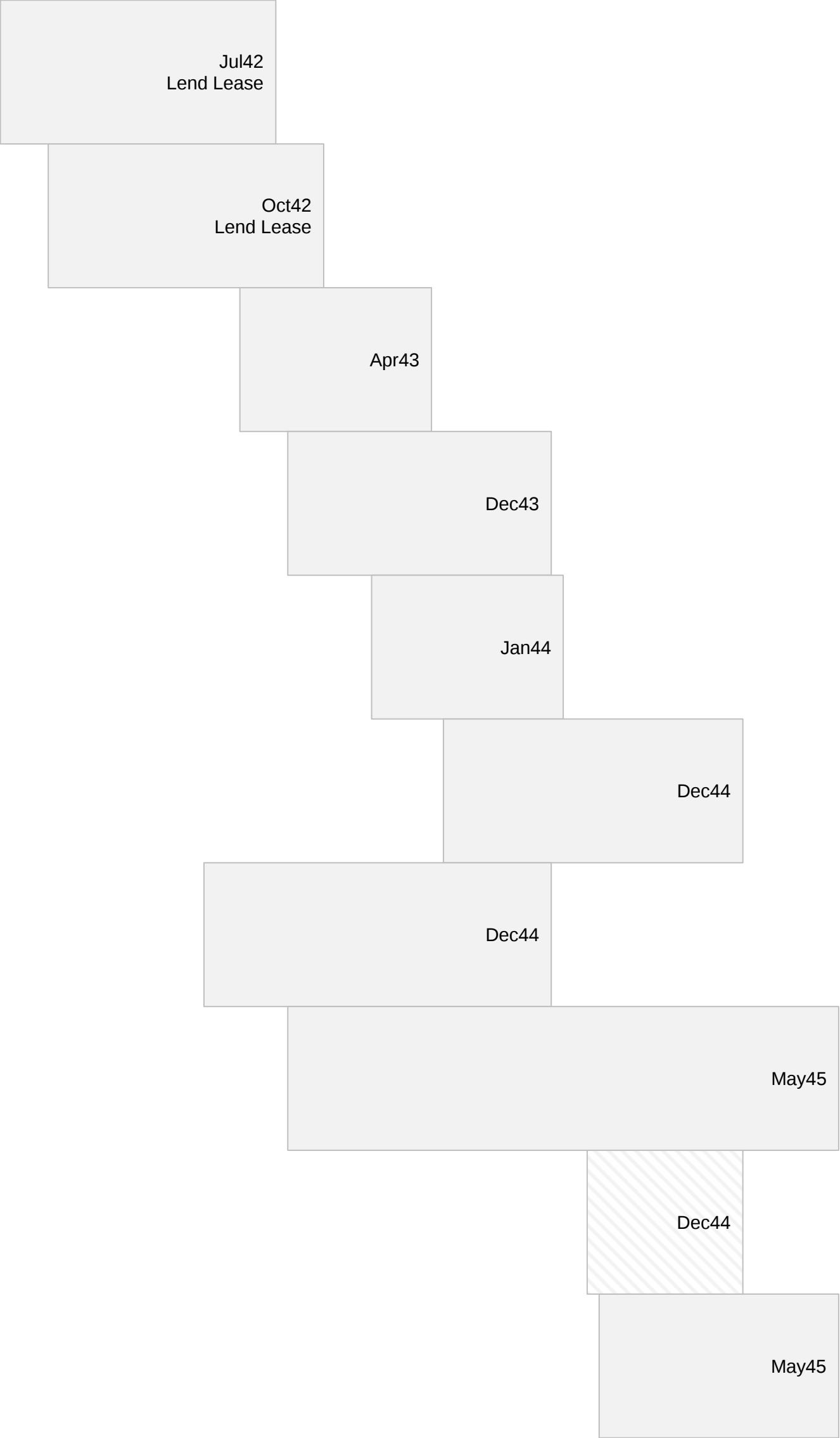
American Light Tank

M3 & M5

Overview

The M3 LT was a reasonable tank, able to meet main battle tanks in many cases. However after the Tunisian campaign it was obvious they lacked the armour to survive and were relegated to other roles. When the M24 came out the Americans once again possessed a light tank that could take on most of the roles of the medium tank.

Feb41 4526  M3/5MG LT
May41 1285  M3/3MG LT
May42 2300  M3A1/e LT
Sep42 2321  M3A1/I LT
Jan43 1700  M3A3/e LT
Jun43 1727  M3A3/I LT
Mar42 2075  M5 LT
Sep42 8884  M5A1 LT
Mar44 830  M22 LT
Apr44 4731  M24 LT Chaffee

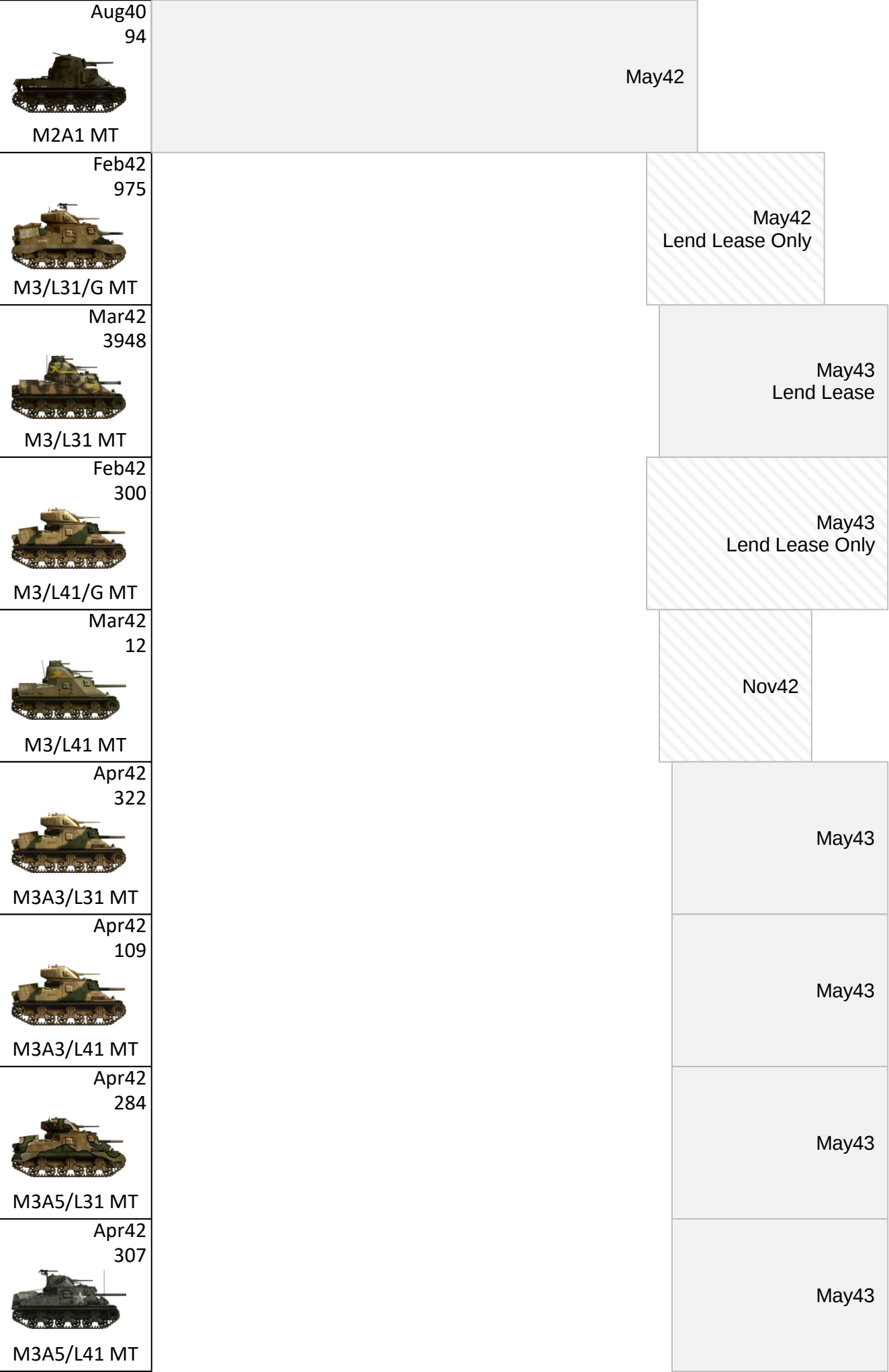


American Medium Tank

M3

Overview

The M3 MT did not have a long life, however when Britian needed tanks it was the US could offer. The Americans also used this vehicle in small numbers in the Pacific and in North Africa, but once the Tunisia campaign was over it was replaced with the M4. I wonder if the US left the M3's in Africa?



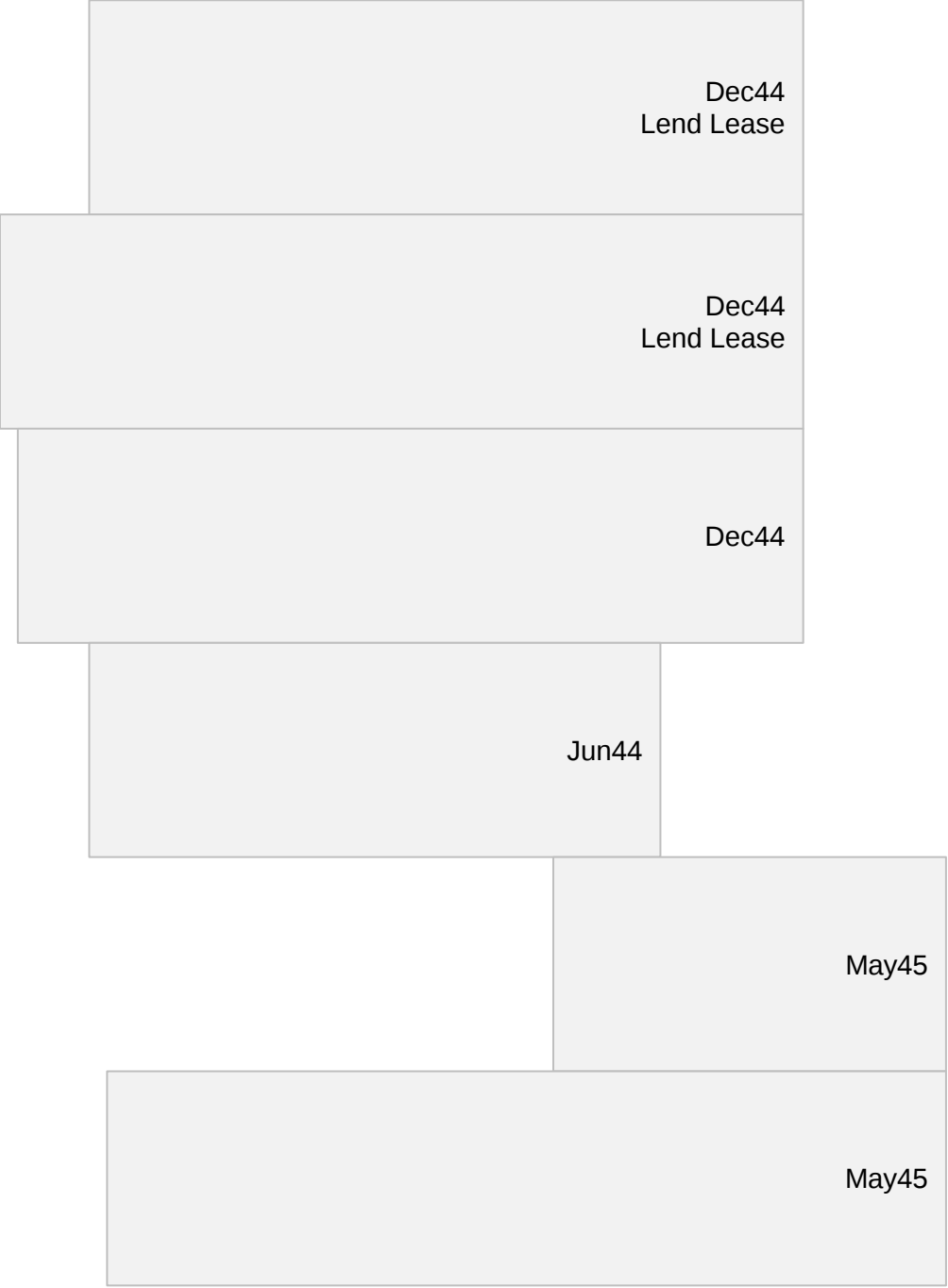
American Medium Tanks

M4 / 75mm

Overview

Many of the early M4’s were shipped to the British in North Africa, and almost half were shipped to allies during the war. This still left the US army with a large number of these vehicles. After June 44 the main focus was in the production of the 3-inch armed version and by the end of the war only a third of the tanks were the 75mm armed variety.

Jul42 6748  M4(75) MT
Feb42 6248  M4A1(75) MT
Apr42 8053  M4A2(75) MT
Jun42 1690  M4A3(75) MT
Feb44 3071  M4A3(75)W MT
Jul42 7499  M4A4(75) MT

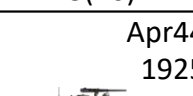
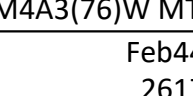


American Medium, Heavy & Assault Tanks

M4 / 3-inch

Overview

After the initial encounters with the Germans in france in June 1944 there was a major focus on upgrading the gun with the 3-inch. This took time and by the end of the war only 2/3 of all the M4 MT's were armed with the 3-inch gun. The Americans did ship this vehicle to the Russians, who liked the Gun..

Jan44 3425  M4A1(76) MT
Apr44 2915  M4A2(76) MT
Sep44 2617  M4A2E8(76) MT
Mar44 1925  M4A3(76) MT
Apr44 1925  M4A3(76)W MT
Feb44 2617  M4A3E8(76) MT

		May45
		May45
		May45
		May45
		May45
		May45

Jan45 2424  M26 Pershing
Jan45 25  M26 S Pershing
Jun44 54  M4A3E2(75) AT
Aug44 200  M4A3E2(76) AT

		May45
		May45
		May45
		May45

American Close Support tanks

75mm / 105mm

Overview

The americans initially decided to provide HE support for the infantry with a 75mm Howitzer armed vehicvle, initially the T30 and then the M8 HMC. For the armour itw as determined the tanks 75mm gun would be sufficient, however it was quickly disocvered how effective the british 105mm armed sherman was and the american copied thjis idea for their armour.

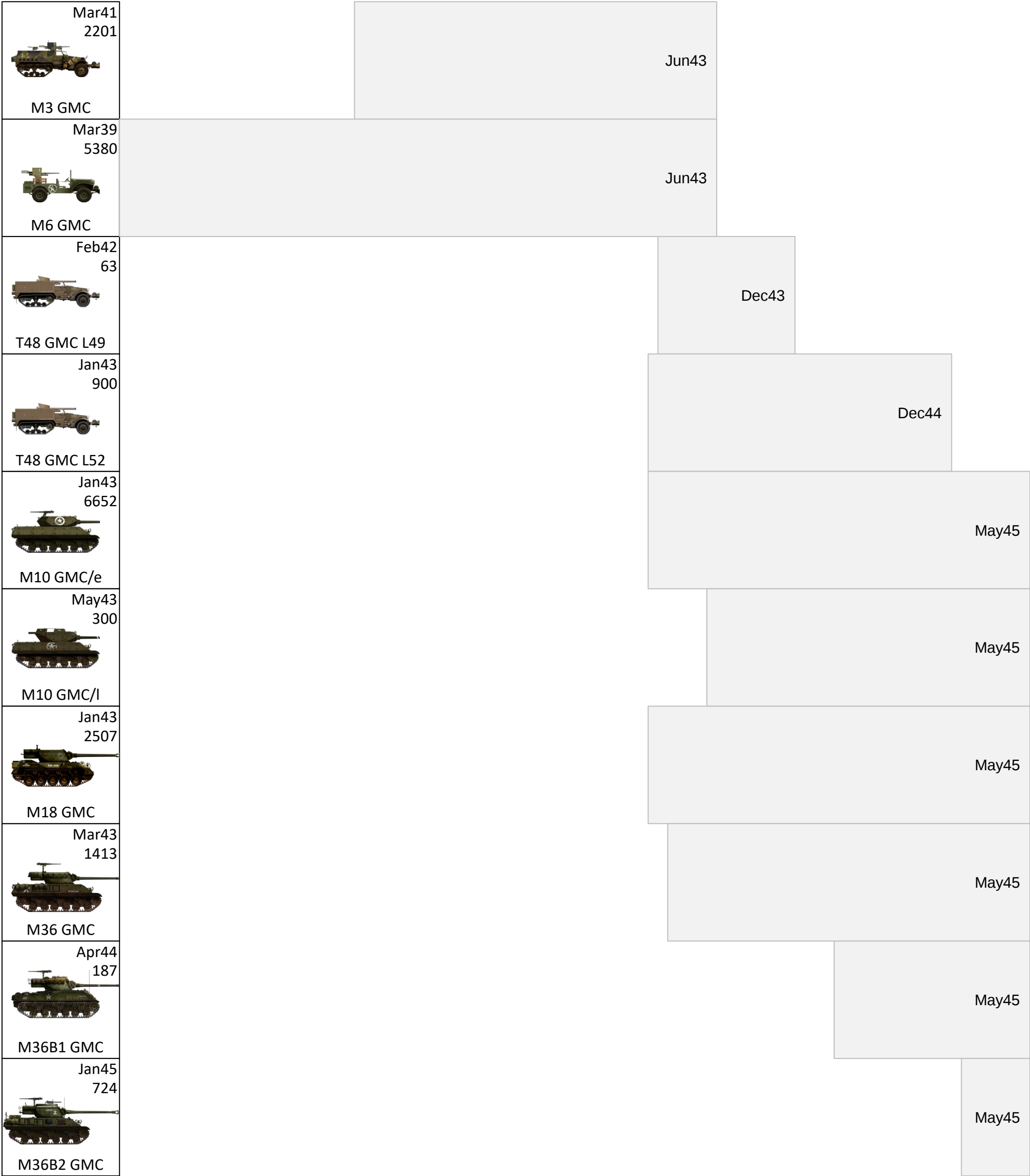
Mar42 324  T19 HMC
Mar42 500  T30 HMC
Jan43 1779  M8 HMC
Feb44 441  M4/105 MT
Nov44 1200  M4/105/I MT
May44 3039  M4A3(105) MT
Sep44 2539  M4A3E2(105)



American Tank Destroyers

Overview

Once the americans realised their guns were not capable of penetrating German armour at any range a major focus went into putting bigger guns ontop of lightly armoured chassis. Unlike the failure of the M6 GMC, the gun was large enough to be useful.

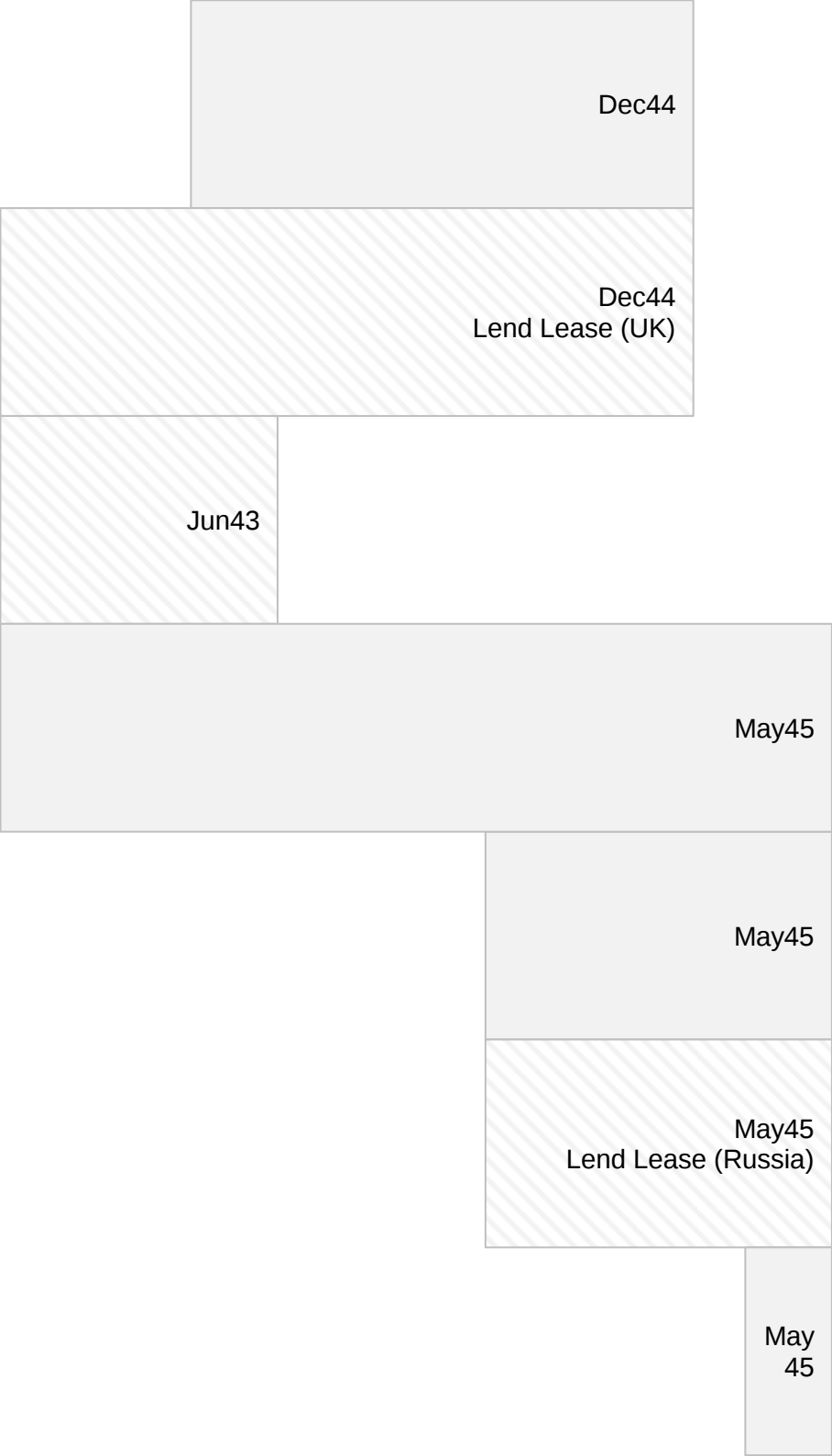


American Self propelled Anti-Aircraft Guns

Overview

The americans determined they needs a self propelled aa weapon for the landing in north africa, after toying with the T2B1 they started produciung the M15, which provided to be a very successful weapons system. This was initially joined by the M13, which was then replaced by the M16.

Mar43 1103  M13 MGMC
Jul42 1905  M14 MGMC
Jul42 80  T28E1
Jul42 1732  M15A1 CGMC
Apr44 2877  M16 MGMC
Apr44 1000  M17 MGMC
Mar45 300  M19 MGMC



American Self propelled Artillery
Hopwitzer, Gun & Mortars

Oct40
572



M4 MMC

Dec42
600



M4A1 MMC

Jan44
110

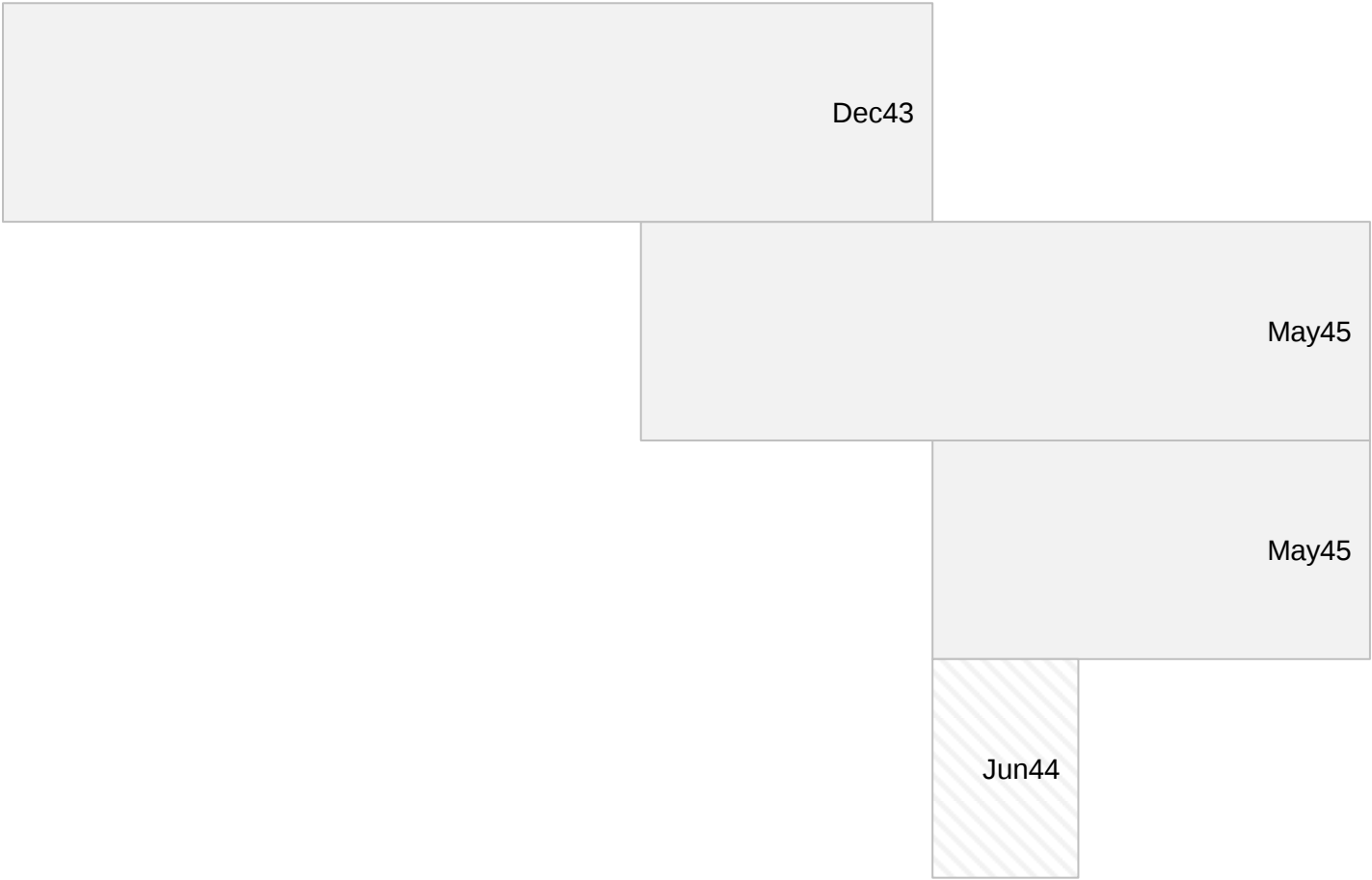


M21 MMC

Jan44
2



T21E1 MMC



Feb42
4316



M7 HMC

Jan44
316



M7B1 HMC

Mar44
100



M12 GMC

Feb45
51

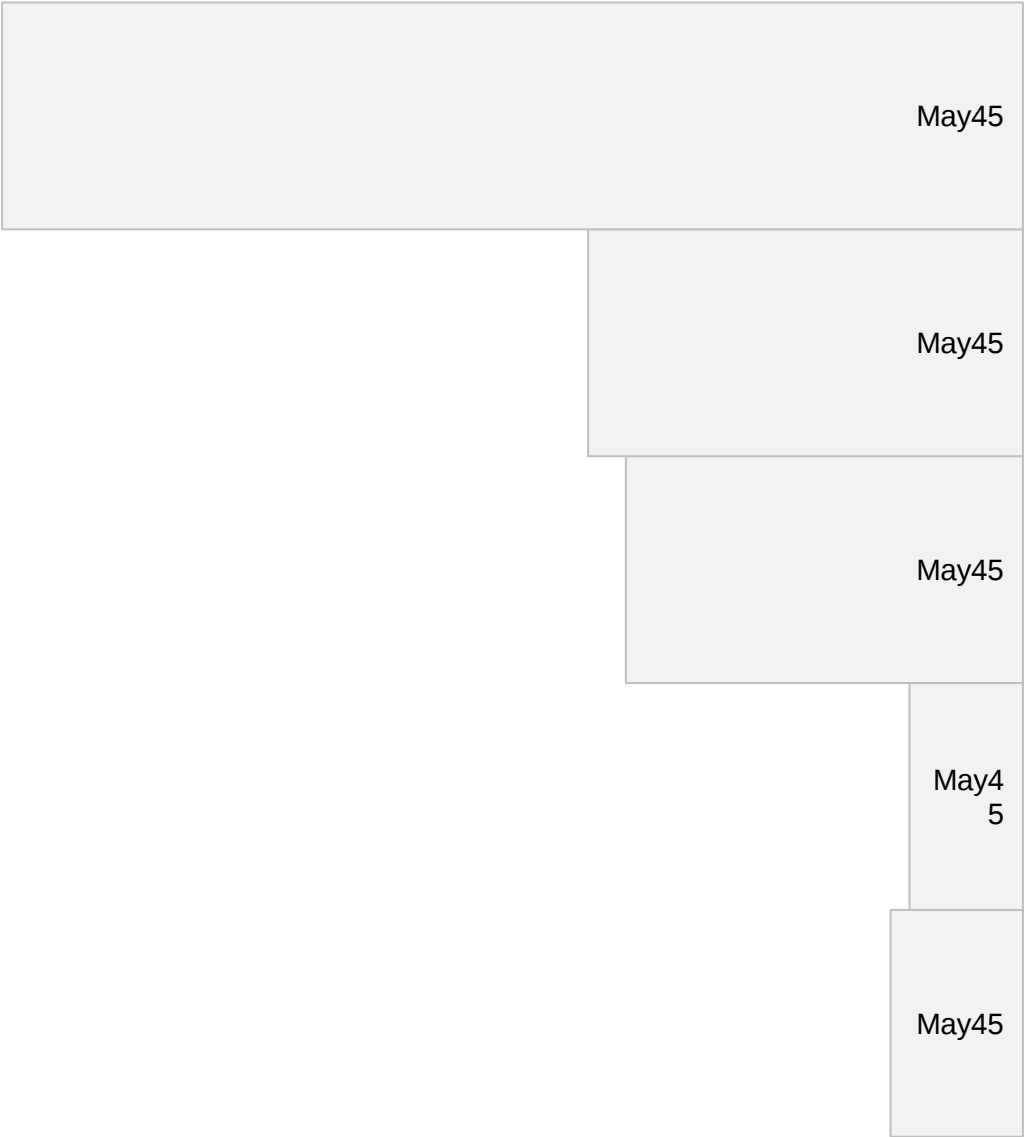


M37 HMC

Jan45
418



M40 GMC



American Artillery

A/T & A.A. Gun

Overview

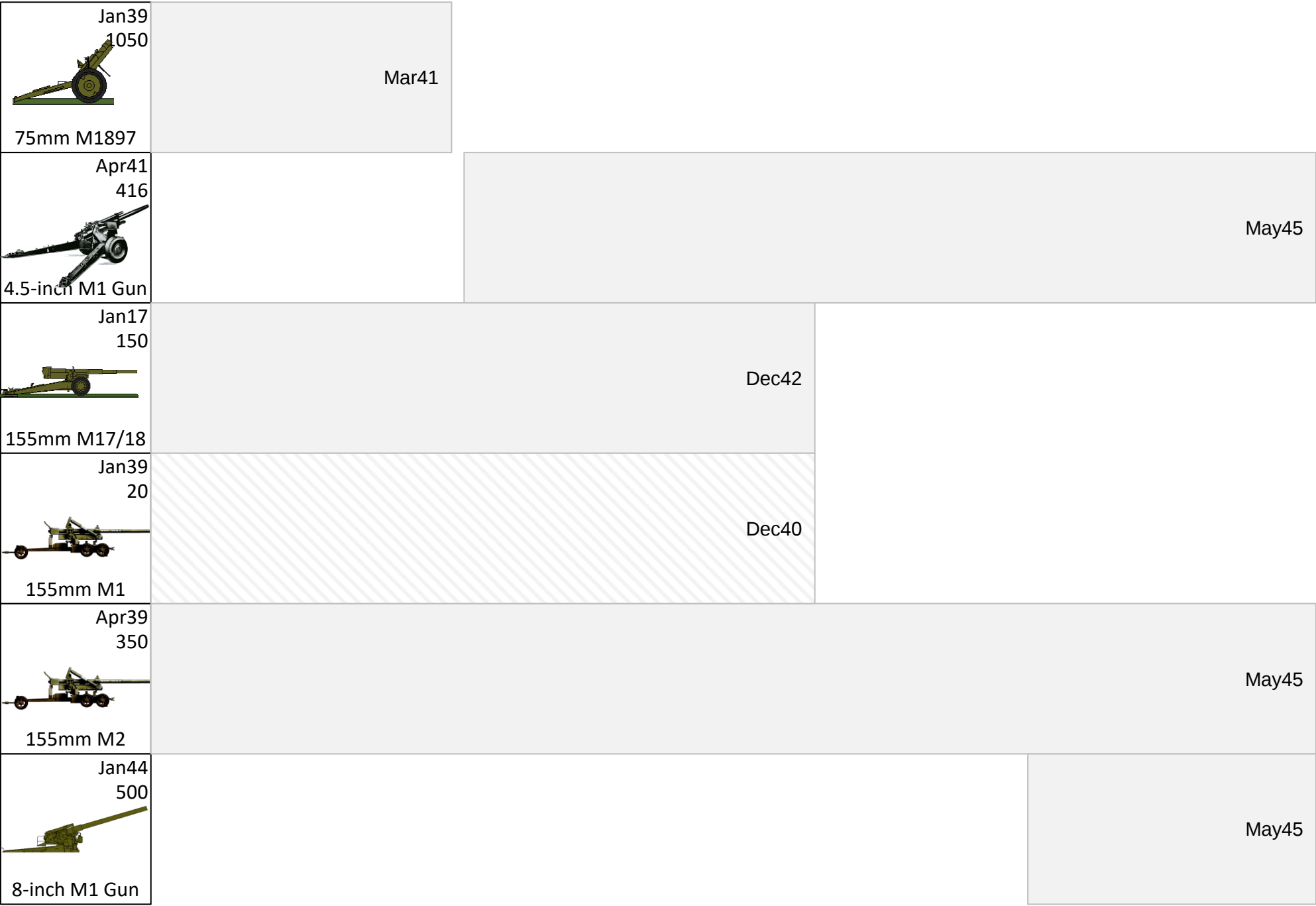
Apart from the 37mm M3, the Americans ended the war with the A/T guns it possess in december 1942. The 57mm M1 was the primary A/T gun, with the 3-inch taking the place of a special tank destroyer weapon. The same applied with the MG and light A.A weapons, but the 90mm AA went through a number of improvements, ending with the excellent 90mm M2. All good weapons equal to the best available to the Germans.

Jan39 18702  37mm M3A1	Dec43		
Jan42 15000  57mm M1 Mk1	May45		
Jan42 637  57mm M1 Mk2	May45		
Dec42 2500  76mm M5	May45		
Jan33  M2 AAMG	May45		
May43 10000  M45 AA	May45		
Sep39 7278  37mm AG M1	May45		
May41 12000  40mm AG M1	May45		
Mar40 200  90mm M1 AA	Aug41		
May41 14800  90mm M1A1 AA	Dec43		
May43 24000  90mm M2 AA	May45		

American Artillery Gun

Overview

The 75mm M1897 and the 155mm M17/18 was obsolete before the americans went to war, but the 155mm M1/M2 provided to be outstanding replacements. Very late in the war the 8-inch M1 was introduced. Filling the gap was the 4.5-inch M1, a good weapon which served until the end of the war.

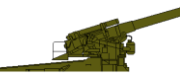


American Artillery

Howitzer

Overview

The americans started the war with the 155mm, 8-inch and 240mm M1917/18, all of wwii vintage. By the time american was involved in the war it had replaced all these weapons with highly effective modern guns. The only gap was a heavier pack howitzer, which is deployed in 1943.

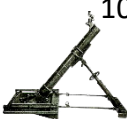
 Dec40 5360 75mm PH M1A1			May45
 Feb43 2580 105mm PH M3			May45
 Jan41 8536 105mmH M2A1	May45		
 Jan17 2129 155mm M1918	Dec41		
 May41 10300 155mm How M1	May45		
 Jan39 500 8-inch How M1	May45		
 Nov18 330 240mm M1918	Dec43		
 Jan43 315 240mm M1 How	May45		

American Artillery

Rocket, Mortar & Recoiless

Overview

The americans field two excellent mortas at the beginning of the war and in december 1942 added a heavy mortar, which was never available in large numbers but provided effectivne nonetheless. The american came late to the rocket artillery idea and only fielded two varieties, which were adequate but not used in large numbers. The Recoiless rifle was the final innovation, few saw service.

Jan40 60000  60mm M2				May45	
Jan40 40000  81mm M1				May45	
Dec42 1000  107mm M2					May45

Jan44 1200  T27-8					May45
Jan44 600  T27-24					May45
Jan44 1200  Jeep w/T27-8					May45
Jan44 600  Jeep w/T40-20					May45
Jan44 600  Truck w/2 T27-8					May45
Jan45  57mm M18 RCL					May45
Mar45  75mm M20 RCL					May 45

American Armoured Personel Carriers

Half Tracks & Tracked

Overview

The american half track is an icon of american mechanisation and its provided to be a highly effective APC. Unlike the geramns, the americans rarely went into battle mounted in these vehicles. Often overlooked is the T16 cartrier, a larger, american built, bren gun carrier. Mainly used in support roles.

Jan40 13058  M2 HTP			May45
Jan40 2026  M9 HTP	May45 Lend Lease		
Jan43 13000  T16 Carrier			May45
Jan40 15094  M3 HTP	May45		
Jan40 100  M5 HTP			Dec43 Lend Lease

BRITISH VEHICLES & ARTILLERY

GENERAL

The British was the first fully motorised army and while early formations had to rely on civilian vehicles it gave the British a significant mobility benefit. However in 1939 the British was burdened with a large pool of obsolete vehicles and weapons, of which most was lost at Dunkirk. This gave the British a chance to totally upgrade its army with modern weapons.

TANKS

Tanks was the British weak spot, due to the method they were designed and manufactured, the tanks often provided inferior and not reliable. Some notable exceptions are the Matilda and the later Cromwell, but overall their tanks were poor. When the Cromwell was introduced they finally had an adequate tank and the Comet was a good tank. At the end of the war the excellent Centurian was produced, but it saw no action.

TANK DESTROYERS

The British began to adopt tank destroyers in the latter period of the desert war, with the Archer and then version of the US M10. Like the Americans the British needed tank destroyers because these vehicles could mount weapons capable of penetrating German late war armour. The Sherman Firefly negated a lot of the reason for tank destroyers.

ARTILLERY

The British created a combined gun howitzer, the 25 pounder. This was an excellent and modern weapon, but at 88mm has a lighter shell than the German 10.5 cm. Greater numbers and the fact the 25-pounder was a more modern weapon allowed the British to match the Germans in the light artillery area. The British medium artillery was equally modern and effective. Most of the older medium guns were lost in France, so the British could field the modern 4.5-inch and 5.5-inch Guns. While smaller than the German 15 cm, they were actually superior weapons. The German 15 cm always had a range problem, which was partially resolved by the use of RAP ammunition, but this reduced the size of the shell accordingly.

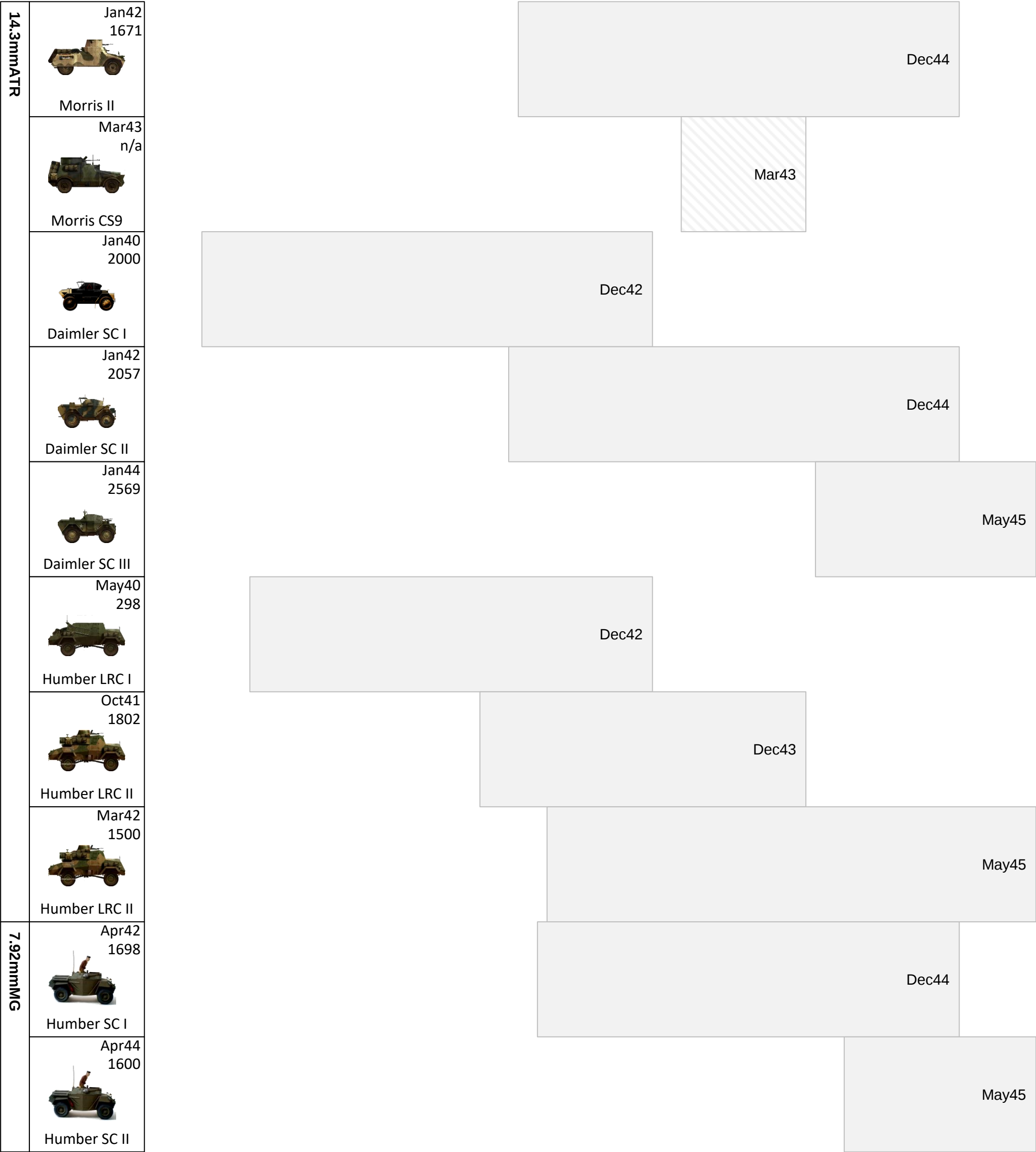
The British started the war with a very advanced a/t gun, the 2-pounder. In 1940 to 1941 this was an excellent weapon, but by 1942 was proving to be lacking. The one major issue with this weapon was the lack of a HE shell, but the German 3.7 cm was not exactly an effective HE weapon either. The 6-pounder proved to be an excellent a/t gun which served the British until the end of the war. It managed to remain an effective a/t gun by the use of the APDS round, which had excellent armor penetration capabilities. However the real queen of the a/t guns was the 17-pounder with an APDS round. This was an excellent weapon, similar to the German 7.5 cm L/70 gun, but with far superior ammunition.

British Scout Cars

ATR/MG

Overview

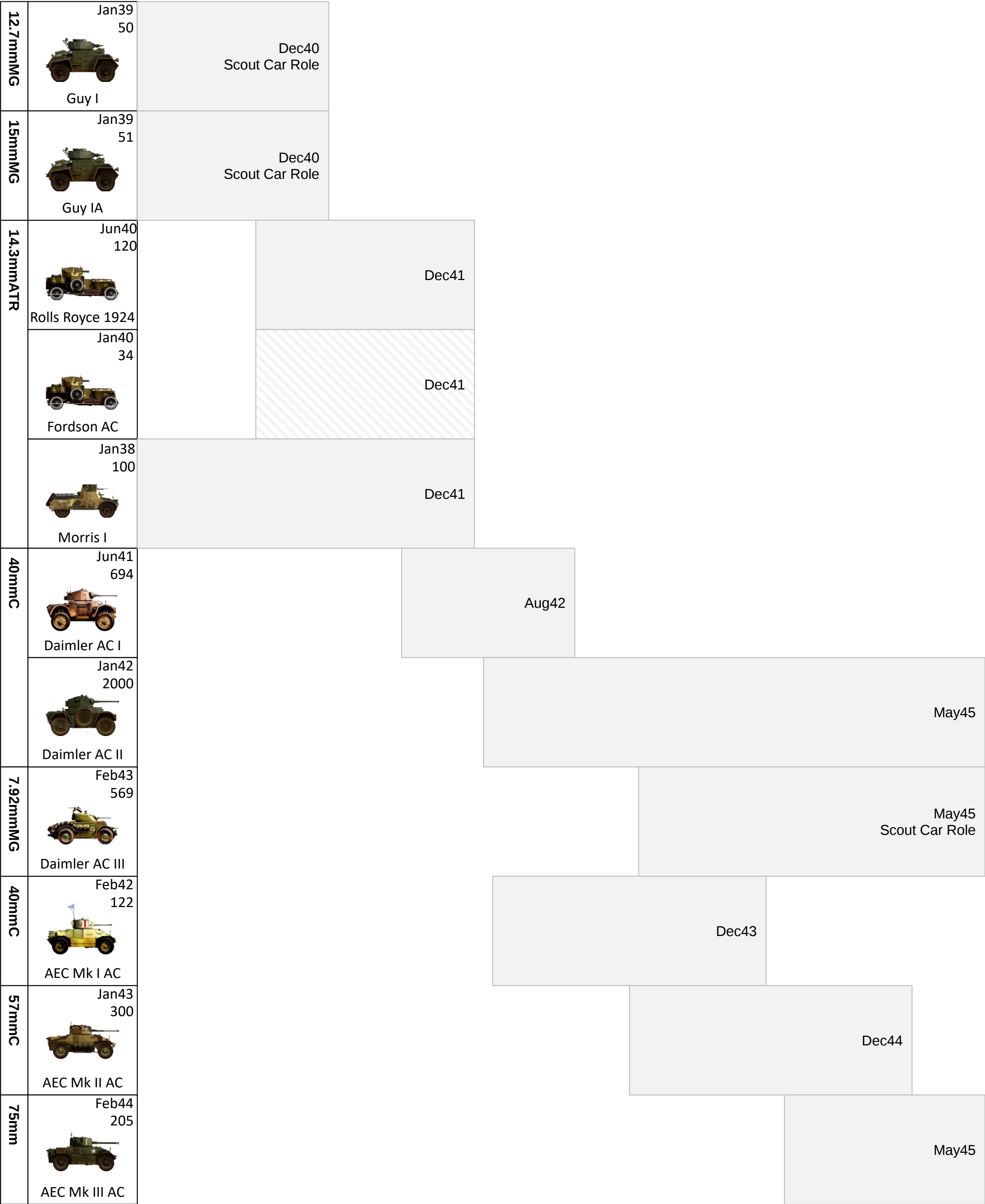
The British developed an astounding array of scout cars. They were too light to perform transition reconnaissance operations, they did provide used in supporting roles. There were two basic types, the A/T rifle armed and the MG armed.



British Armoured Cars

Overview

The British developed a large number of different armoured cars, unlike the scout cars these were designed to fight other light armoured vehicles. The early ones were armed with A/T Rifle, but this was upgraded to the 2-pounder, 6-pounder and finally the 75mm gun.



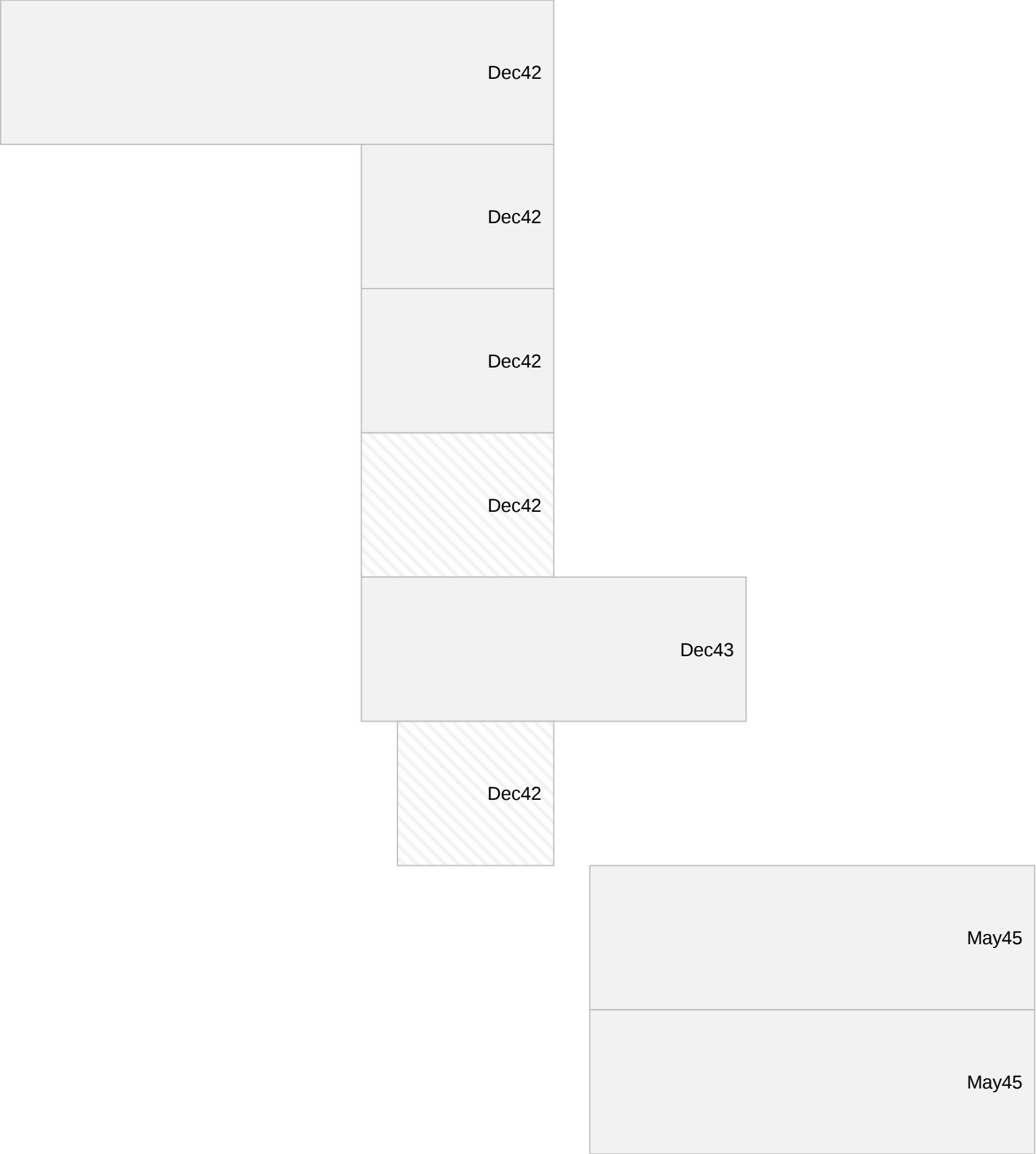
British Armoured Cars

Martin Herrington

Overview

The martin Herringtons were designed and manufactured in south africa and provided a useful armoured car. The early one were armed with A/T rifles, but this was found as inadequate and a number of field modifications were made to upgrade them with 20mm, 37mm and 47mm cannons captured from the italians. The final evrsionw as armed with 2-pounders.

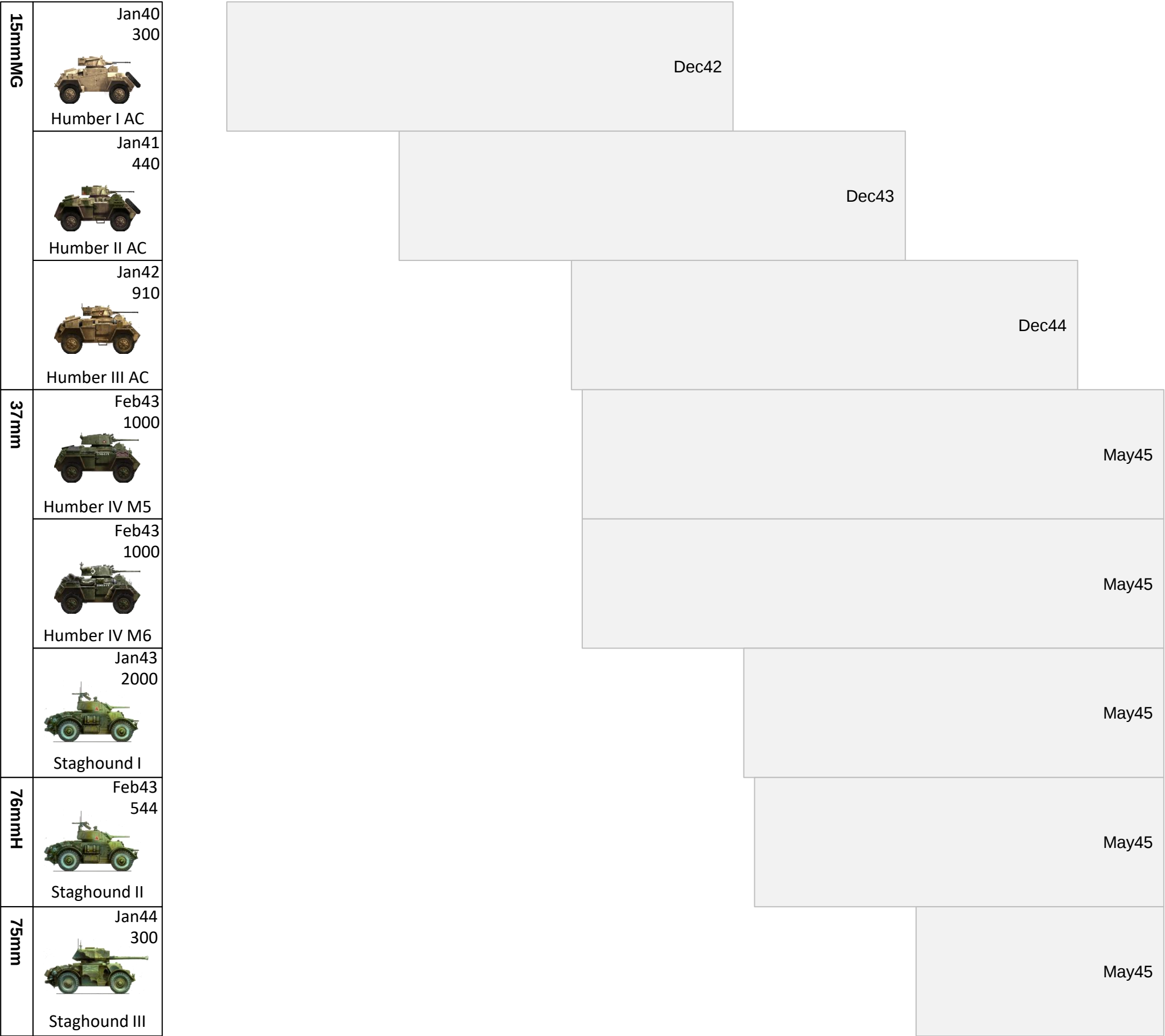
14.3mmATR	Feb40 113  M.Herrington I
	Feb41 887  M.Herrington II
20mmC	Feb41 80  M.Herrington II/20
47mmH	Feb41 7  M.Herrington II/47
14.3mmATR	Dec41 2630  M.Herrington III
20mmC	Dec41 30  M.Herrington III/20
40mmC	Mar43 2000  M.Herrington IV
	Mar43 1200  M.Herrington IVF



British Armoured Car

Overview

Apart from the a/t rifle armed vehicles, the British only use a heavy MG armed version in light reconnaissance roles. They also experimented with a Close Support version, armed with a 3-inch howitzer. This proved useful if the oppoents were infantry.



British Light Tanks

Vickers 15mm HMG & 7.92mm MG

Overview

The British light tank in 1939 was the Vickers Light Tank. This proved less than successful and after they met the Germans in the desert they were retired. They performed well against the Italians, once the Italian line was broken.

Jan3233  Vickers Lt II	Jun40
Jan3333  Vickers Lt II/MG	Jun40
Jan3221  Vickers Lt III	Jun40
Jan3321  Vickers Lt III/MG	Jun40
Jan3417  Vickers Lt IV	Jun40
Jan3517  Vickers Lt IV/MG	Jun40
Jan3422  Vickers Lt V	Jun40
Jan3422  Vickers Lt V/MG	Jun40
Jan36261  Vickers Lt V1A	Mar41
Jan37914  Vickers Lt V1B	Mar41
Jan39167  Vickers Lt V1C	Mar41

British Light Tank

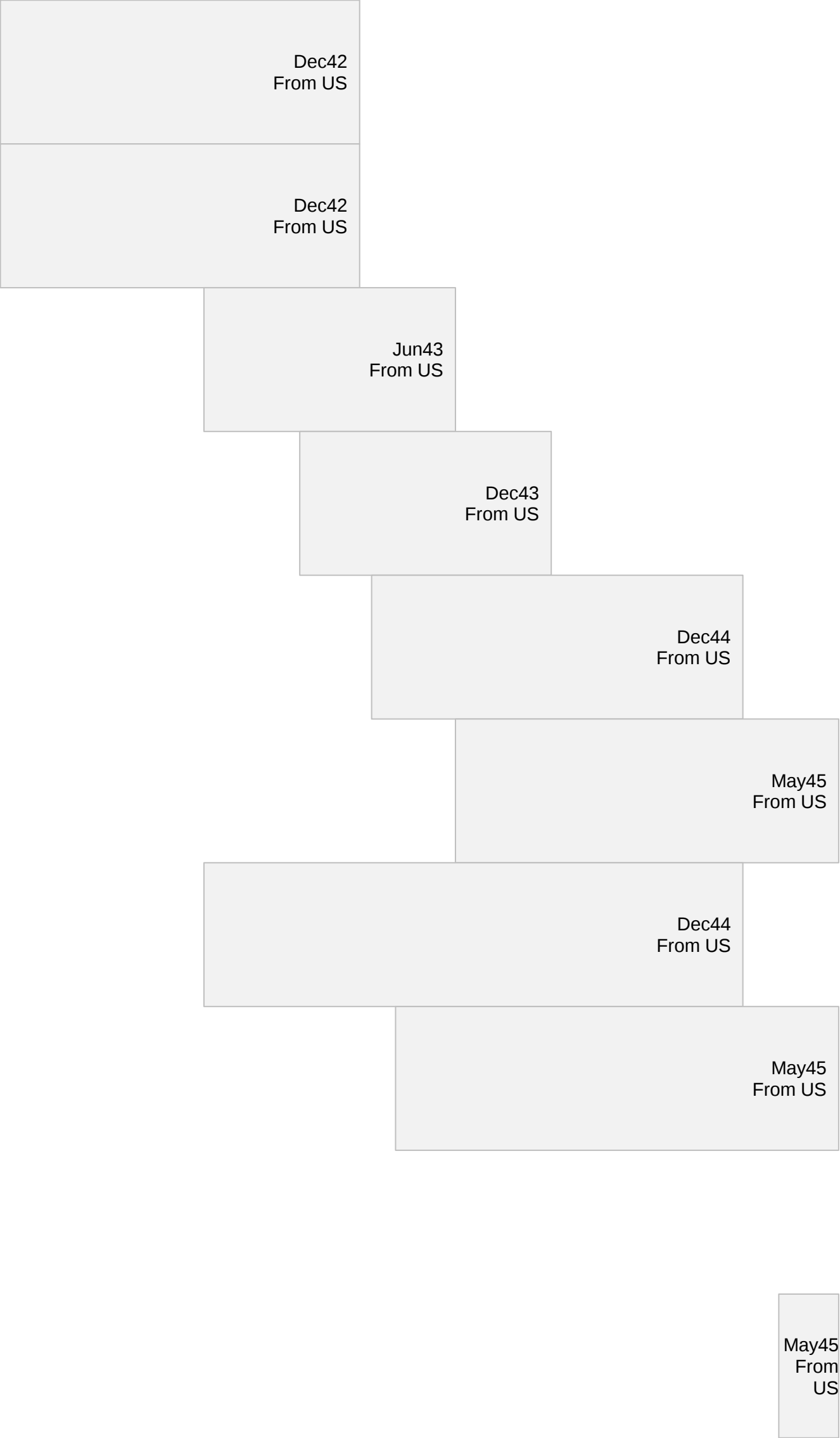
Stuart & Chafee

Overview

The British received large number of light tanks from the US and these quickly became the standard light tank of the British army. Early in the war the british received the bulk of the production run, but this was shared with the Russians after June 1941 and the US army from 1942. They received few of the modern chaffee.

Feb41 4526  Stuart I/5MG
Feb41 1285  Stuart I/3MG
Mar42 2000  Stuart III/e
Sep42 2621  Stuart III/l
Jan43 1427  Stuart V/e
Jul43 2000  Stuart V/l
Mar42 4000  Stuart VI/e
Mar43 4881  Stuart VI/l

Apr44 4731  Chaffee
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British Light Tanks

Special

Overview

The british Tetrach light tank was not successful and was not used. By 1944 the britsih wanted a light tank which could be air dropped. The Harry Hopkins was not very successful, but the amercian Locust was more successful. IN practice the vehicles were not successful.

Feb40
95



Tetrarch I

Jan44
100



Harry Hopkins

Mar44
830



Locust

Aug42

Nov44

May45

British Cruiser Tanks

Cruiser/Crusader

Overview

The initial cruiser tanks were too light and unreliable and suffered accordingly. The following crusader were superior, but they also lacked reliability and were too light. With the end of the north africa campaign the british replaced their tanks with American M4 Shermans.

Jan37 126  A9 Cruiser I	Dec41		
Jan39 171  A10 Cruiser II	Dec41		
Jan39 65  A13 Cruiser III	Dec41		
Jan39 270  A13 Cruiser IV	Dec41		
Jun40 1753  Covenantor	Dec42 Staying in the UK		
Feb41 1000  Crusader I	Dec42		
Apr41 999  Crusader II	Jun43		
Apr42 1678  Crusader III	Jun43		

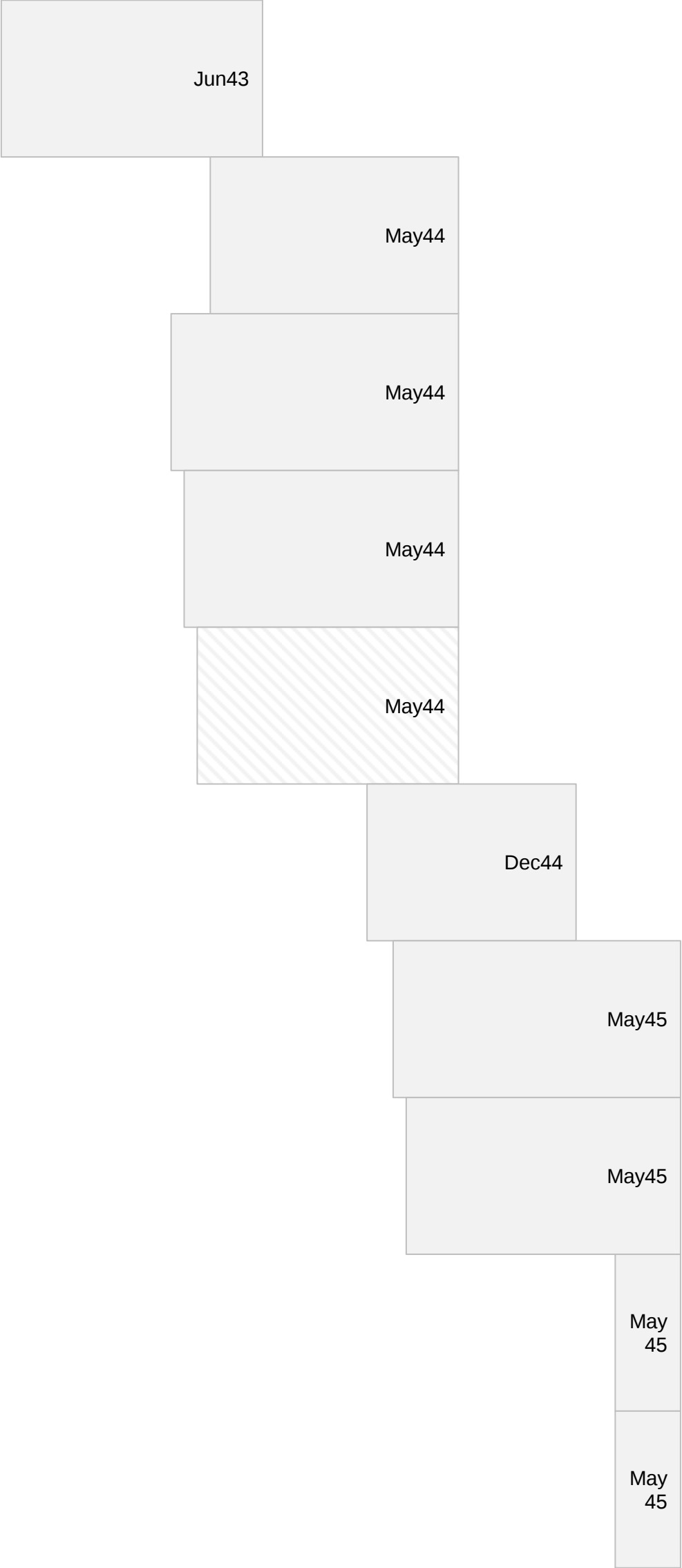
British Cruiser Tank

Cromwell

Overview

The replacement to the crusader was an effective tank. Fast, with reasonable armour and a good gun and will sufficient reliability to make it liked by its crew. The Cromwell was a successful tank, however it was still inferior compared with the German vehicles.

Apr42 161  Cavalier
Apr43 273  Centaur III
Jan43 357  Cromwell I
Feb43 357  Cromwell II
Mar43 39  Cromwell III
Jan44 470  Cromwell IV
Feb44 400  Cromwell Mk V
Mar44 300  Cromwell Vw
Mar45 1000  Cromwell VII
Mar45 870  Cromwell VIIw



British Medium Tanks

Cruiser Tanks

Overview

The British pre-war medium tanks were all obsolete by the start of world war II. The vickers 6-ton tank, while not used by the british, was used by a number of other countries, such as Poland. Late in the war the british began to product a range of good all round medium tank, or Main Battale Tanks, the comet, challenger and centurion.

Jan29



Vickers 6-ton A

Jan29



Vickers 6-ton B

Jan30
120



Vickers Mk II

Jan45
1127



Comet

Apr44
201



Challenger

Feb45
21



Centurion Mk I

May45

May45

May
45

British Medium Tanks

Lee/Grant

Overview

While not a very successful tank, when it was first shipped to the British the 75mm Gun gave them a significant advantage. However, once the Germans were aware of this the disadvantages of the vehicle become evident. The Russians called in coffin for 7 comrades and cone one the Shermans was available it was replaced.

Feb42 976  Grant I/L31
Oct42 300  Grant I/L41
Apr42 284  Grant II/L31
Apr42 307  Grant II/L41
Mar42 3948  Lee I/L31
Mar42 12  Lee I/L41
Apr42 322  Lee II/L31
Oct42 109  Lee II/L41
Apr42 284  Lee IV/L31
Apr42 307  Lee IV/L41

Jun43 All went to the British	
	Jun43 All went to the British
Jun43 All went to the British	
Jun43 All went to the British	
Jun43 Lend lease to UK & RU	
Jun43	
Jun43 Lend lease to UK & RU	
	Jun43 Lend lease to UK & RU
Jun43 Lend lease to UK & RU	
Jun43 Lend lease to UK & RU	

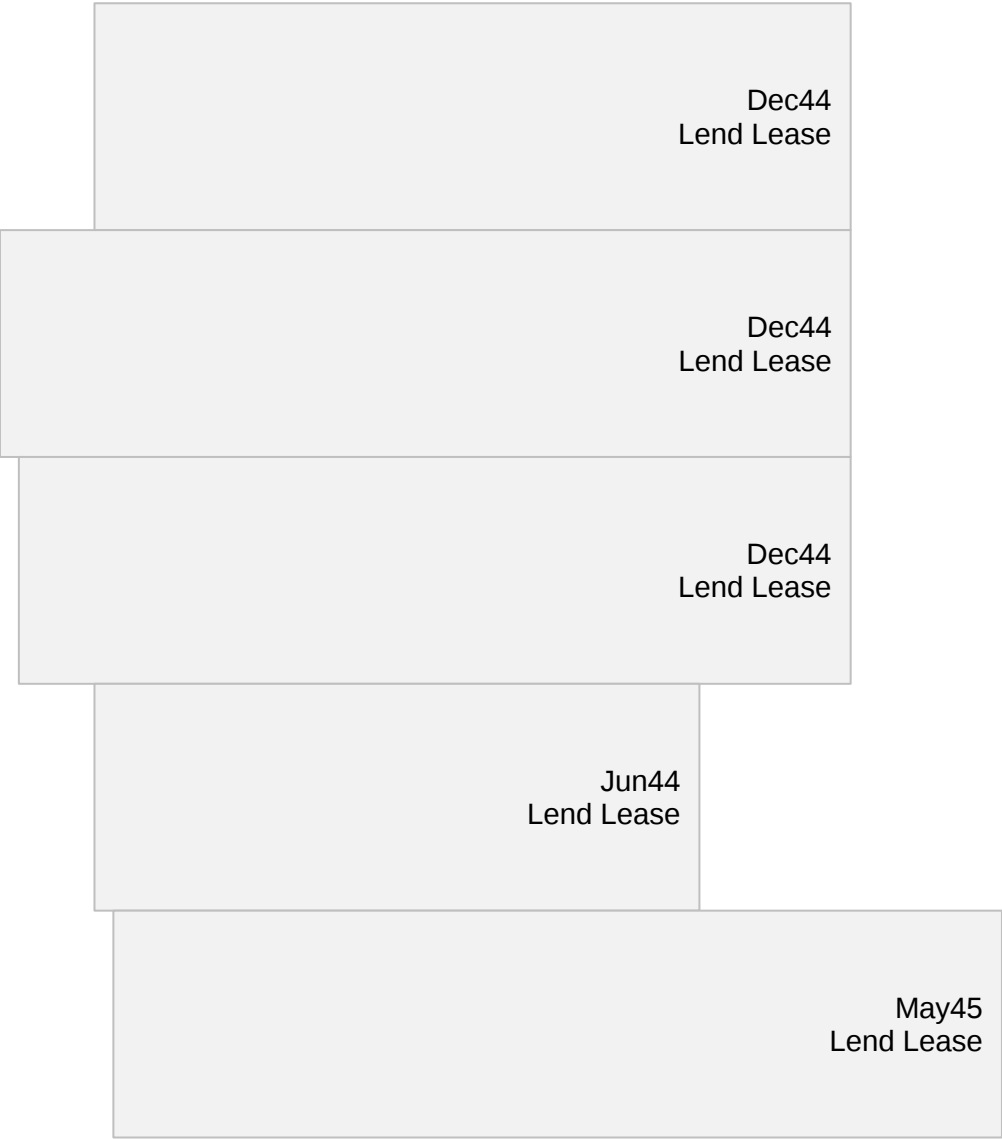
British Medium Tanks

Sherman / 75mm

Overview

Many of the early M4's were shipped to the British in North Africa, and almost half were shipped to allies during the war. After June 44 the main focus was in the production of the 3-inch armed version and by the end of the war only a third of the tanks were the 75mm armed variety.

Jul42 6748  Sherman I/75
Feb42 6248  Sherman II/75
Apr42 8053  Sherman III/75
Jun42 4761  Sherman IV/75
Jul42 7499  Sherman V/75



British Medium, Heavy & Assault Tanks

M4 / 3-inch & 17-pounder

Overview

After the initial encounters with the Germans in france in June 1944 there was a major focus on upgrading the gun with the 3-inch. This took time and by the end of the war only 2/3 of all the M4 MT's were armed with the 3-inch gun. The British created a 17-pounder version of the M4.

Jan44 3425  Sherman II/76
Apr44 2915  Sherman III/76
Mar44 1925  Sherman IV/76
Apr44 1925  Sherman IVA
Mar44 346  Sherman VC

May45 Lend Lease
May45 Lend Lease
May45 Lend Lease
May45 Lend Lease
May45 Conversion

British Infantry (medium) Tank

Valentine

Overview

While not an outstanding tank the Valentine was generally regarded as a successful medium tank. While it was called an infantry tank, it was too light and too mobile to be in the same league as the Matilda or Churchill. The Russians classed it as a light tank.

Feb41 308  Valentine I
Mar41 700  Valentine II
Apr41 2078  Valentine III
May41 1000  Valentine IV
Jun41 1000  Valentine V
Sep42 593  Valentine VIII
Oct42 400  Valentine IX
Nov42 400  Valentine X

Dec42	
Dec43	
Dec43	
Dec43	
Dec43	
Dec44	Many went to Russia
Dec44	Many went to Russia
Dec44	Many went to Russia

British Infantry Tank

Matilda & Churchill

Overview

The one tank the British possessed at the beginning of the war which impressed the Germans was the matilda. Its armour was proof against most german a/t weapons. The matilda II was a significant improvement and its only problem was lack of speed.



British Infantry Tanks

Churchill

Overview

While the matilda provded useful in 1940 and 1941, the churchill proved less useful. While its heavy armour was useful in some circumstances it was not very successful as a main battle tank. Instead it was more useful for specilist roles which required heavya rmour.

Jan42 303		Churchill Mk.I
Feb42 1127		Churchill Mk.II
Mar42 675		Churchill Mk.III
Apr42 1622		Churchill Mk.IV
Jan43 200		Churchill IVNA
Jan44 200		Churchill Mk.VI
Feb44 1200		Churchill Mk.VII
Mar44 1200		Churchill Mk.IX
Mar44 1200		Churchill IX LT
Apr44 200		Churchill Mk.X
Apr44 200		Churchill X LT



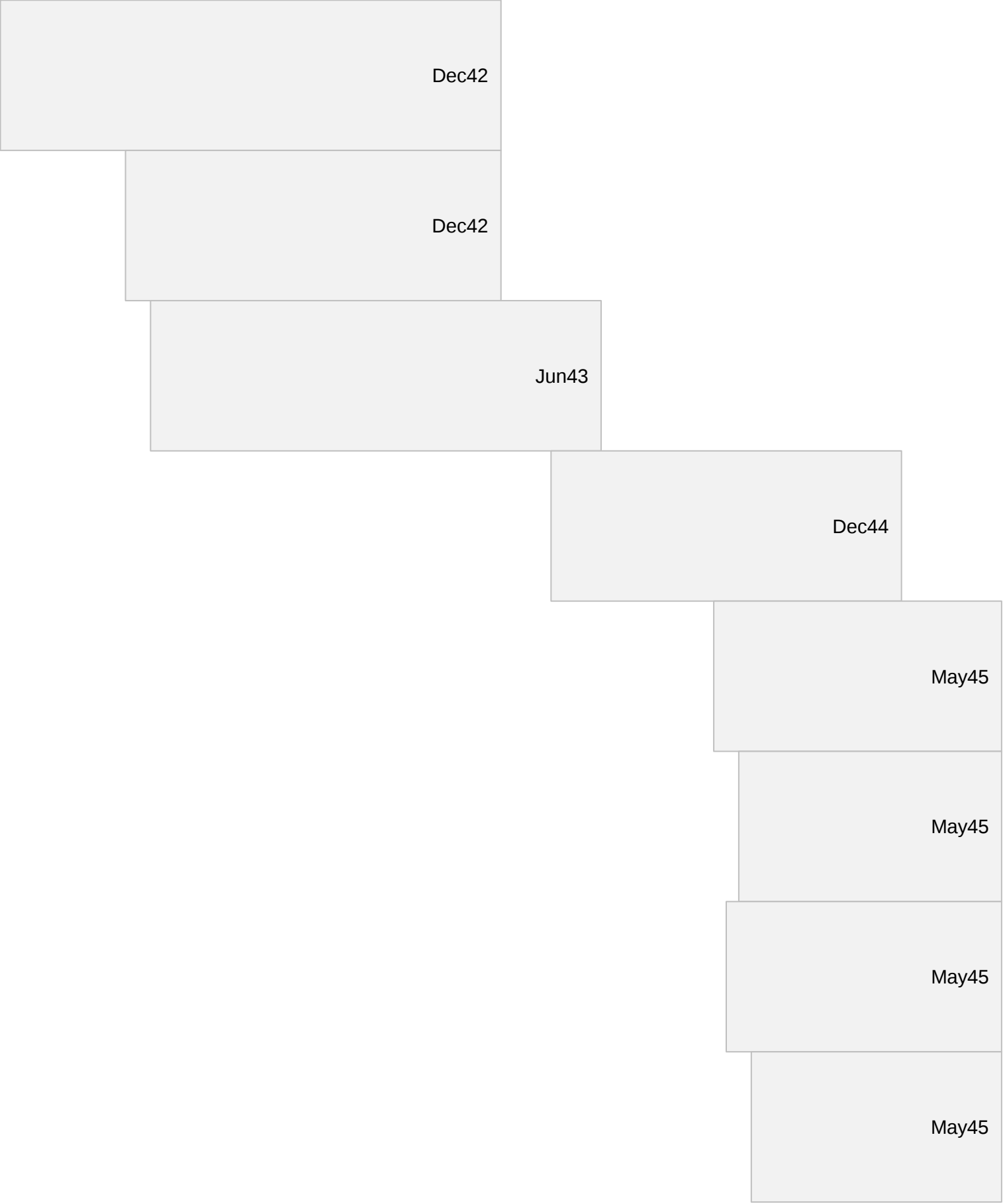
British Close Support tank

Cruiser Tanks

Overview

The British provided close support, or specifically anti-infantry, capacity with the use of their CS tanks. These were tanks armed with a Howitzers, which could be used to fire on dug in infantry or fortifications.

Jun40 170  Covenantor CS
Feb41 100  Crusader I CS
Apr41 100  Crusader II CS
Apr43 233  Centaur IVCS
Jan44 341  Cromwell VI CS
Mar44 341  Cromwell VIwCS
Feb44 341  Cromwell VIICS
Apr41 341  Cromwell VIIwCS



British Close Support Tanks

Medium Tanks

Overview

When the british received the Sherman they initial thought about using its 75mm gun in a close supprot role, however this provided less than satisfactory and they created a CS version of the Sherman, armed with the 105mm Howizters. The americans decided this was a good idea and started producing this vehicle.

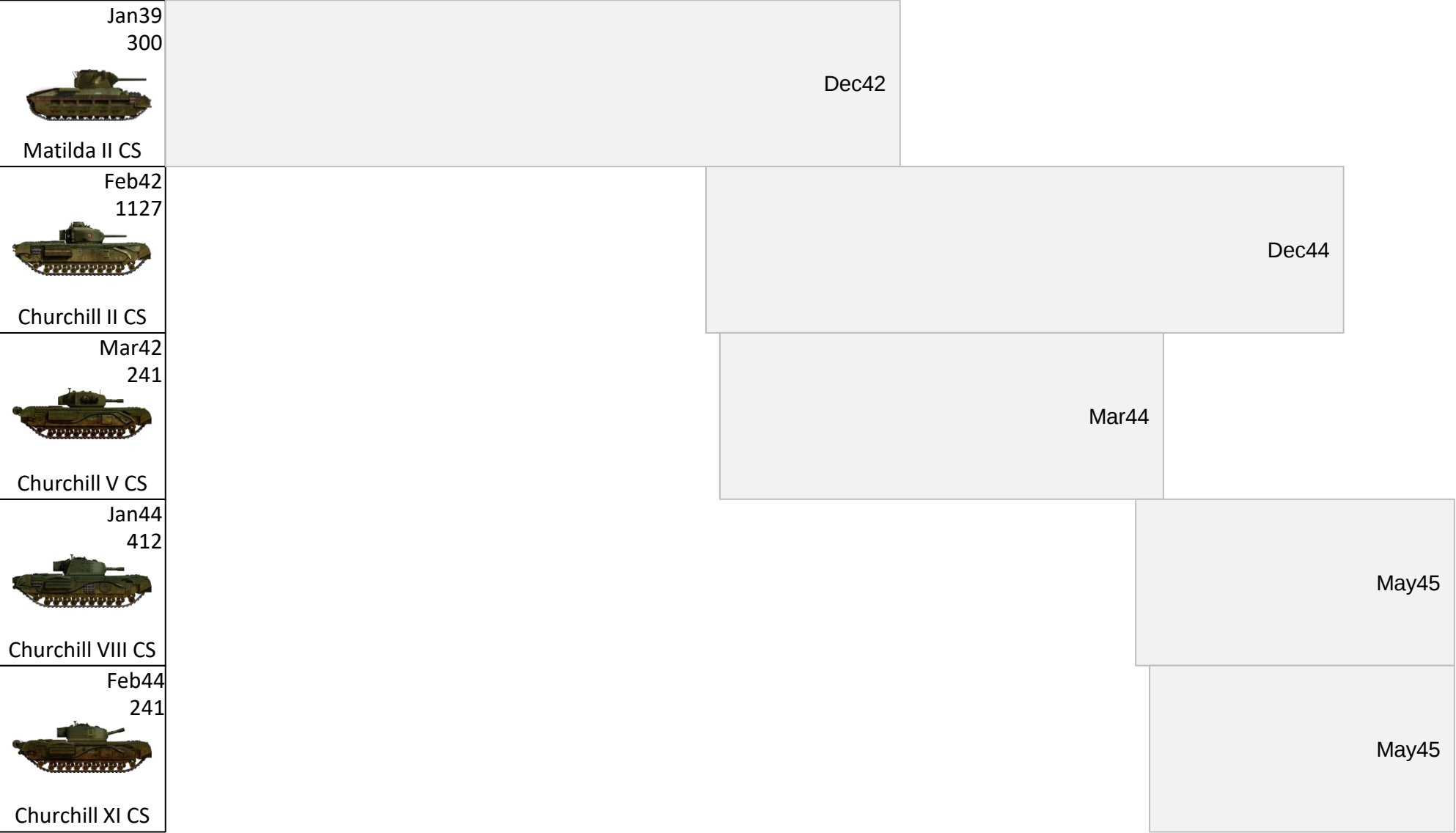
Jan37 12  A9 Cruiser I CS	Dec41	
Jan39 17  A10 Cruiser II CS	Dec41	
Jan39 27  A13 Cruiser IV CS	Dec41	
Feb40 10  Tetrarch ICS	Dec41	
Apr41 18  Valentine IVCS	Dec41	
Aug42 1641  Sherman I/105	Dec44	
Mar42 6281  Sherman II/105	May45	
Jan43 8053  Sherman III/105	May45	
May44 3039  Sherman IV/105	May45	
Feb43 7499  Sherman V/105	May45	

British Close Support Tanks

Infantry Tanks

Overview

The British provided close support, or specifically anti-infantry, capacity with the use of their CS tanks. These were tanks armed with a Howitzers, which could be used to fire on dug in infantry or fortifications. The Cfhurchill provided to be very effective in this role, as its heavy armour allowed it to get clsoe to the target.

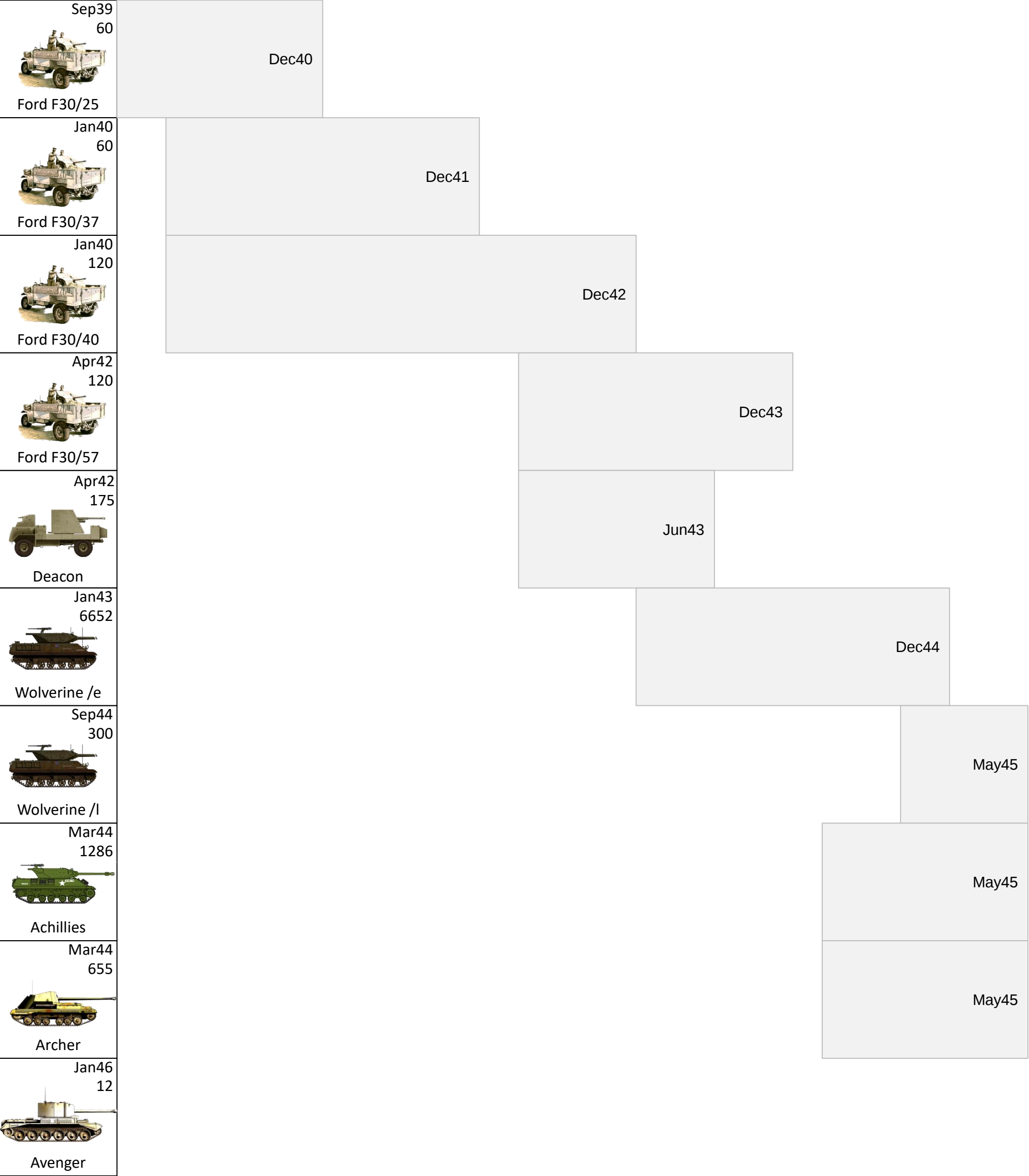


British Tank Destroyers

Wheeled & Tracked

Overview

The first british tank destroyers were a/t guns mounted on the back of trucks, portee. This was done because the french 25mm could not be towed by a truck and the british quickly start firing the gun from the back of the truck instead of dismounting it. It was not until the deacon that the british had an actual tank destroyer. The british used the US M10 and M18 before coming out with their own tank destroyer, the successful archer.

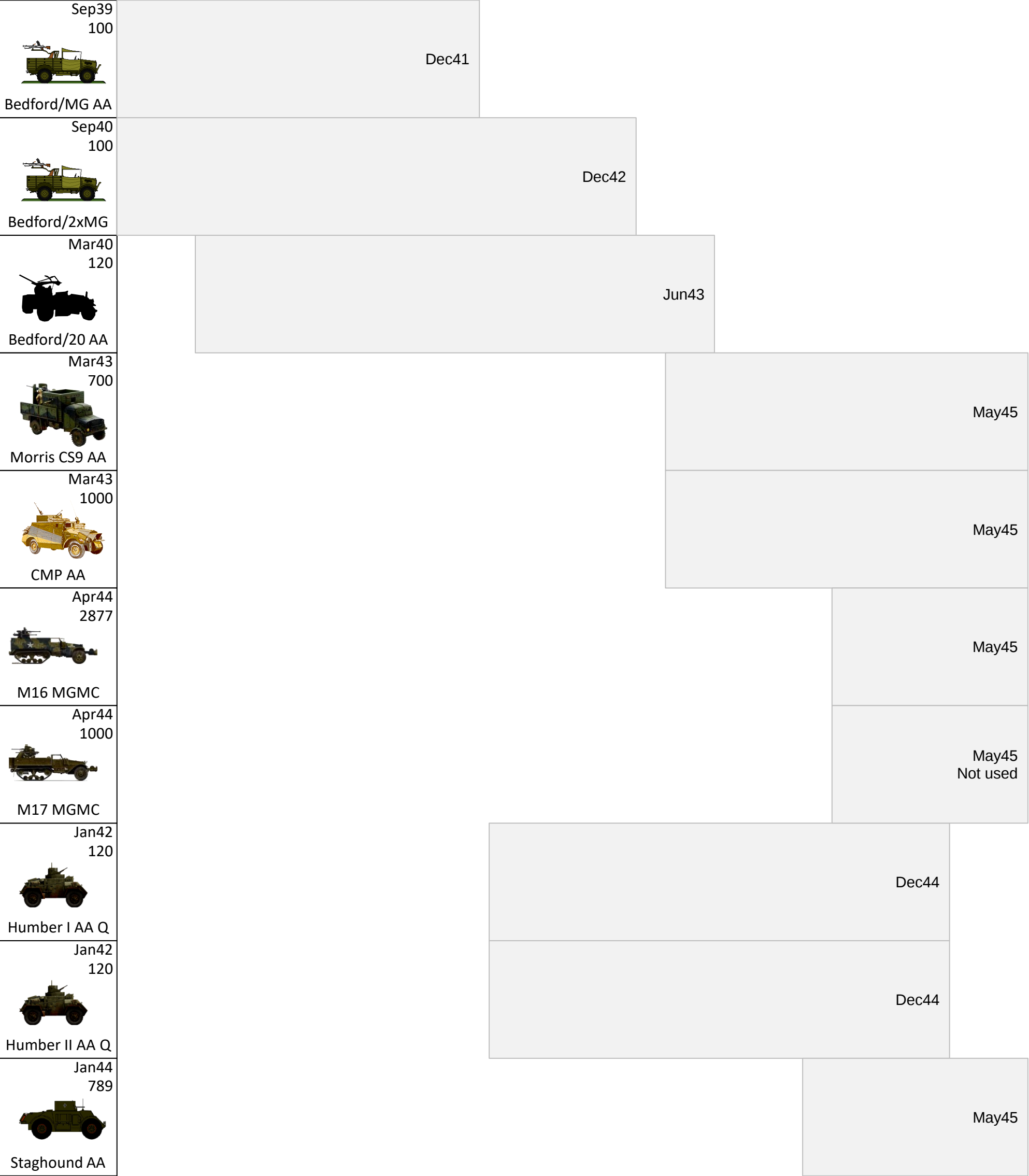


British Self propelled Anti-Aircraft Guns

Wheeled and Half Track

Overview

The british started the war with MG mounted in trucks as their main SP A.A. weapons. This was deemed to be inadequate after the german invasion of poland so the 20mm would mounted in a truck. By 1943 a larger truck mounting the 20mm and 40mm was produced. The british sued the US M16/17, but these were not often utilised. A range of armoured car mounting A.A guns was also produced.



British Self propelled Anti-Aircraft Guns

Tracked

Overview

IN the desert the british determined they needed a fully armoured SP AA weapon, the first used the obsolete chassis of the vickers light tank. The Canadians developed on based on a medium tank, but it was the Cruisader mounted aa weapons which were most successful.

Mar40 60		Vickers LtAA I
Mar40 120		Vickers LtAA II
Mar40 60		Vickers LtAA III
Jan43 12		Skink
Feb44 95		Centaur I AA I
Feb44 95		Centaur II AA II
Feb44 400		Crusader I AA I
Feb44 400		Crusader II AA II
Feb44 200		Crusader III AA II

Dec42
Dec42
Dec42

Dec43

Dec44
Dec44
May45
May45
May45

British Self propelled Artillery Howitzers & Mortars

Overview

The british experiences in the desert made them realise they needed artillery which could keep up with the tanks, so they developed the Bishop. Soon after they received the preist from the US and converted it into the Sexton by the invasion of Europe, to simplify ammunition supply.

Feb42

150



Bishop

Feb42

3490



Priest

Feb44

2026



Sexton

Feb44



Churchill AVRE



British Artillery Anti-Tank Guns

Overview

The british started the war with a good, if expensive and complex, a/t gun, the 2-pounder. Due to lack of numbers the british used the older 37mm and the french 25mm, but after dunkrik they were no longer being used. By the end of 1941 the 2-pounder was no loinmger effective, so the 6-pounder was introduced, followed by the 17-pounder in 1943.

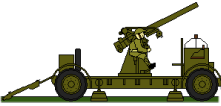
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British Artillery

Anti-Aircraft Guns

Overview

The British started the war with an excellent Medium A.A Gun, the 3.7-inch. After dunkirk the 3-inch was brought in to defend the home country, butw as not used otehrwise. The main light aa was machine guns, which provided inadequet. As a result a 40mm and 20mm a.a gun was introduced.

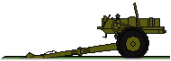
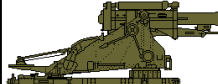
Feb40 7500  Oerlikon 20mm			May45
Feb40  Polsten 20mm			May45
Sep39 2100  Bofors 40mm			May45
Jan14 500  3-inch OQF AA	Jun41 In UK only		
Apr37 10000  3.7-inch OQF			May45

British Artillery

Howitzer

Overview

The british has a vast supply of wwii vintage howitzers. Most were obsolete or only used for the defence of britian and the rest were lost in france. For a short period obsolete howitzers were brought out after dunkirk, but they were eventually replaced by the excellent 25-pounder. The british did use the 75mm Pack-How for their airborne troops.

Jan39 200  3-inch OQF IG	Dec40	
Jan17 120  3.7-inch QF H	Dec40	
Jan17 120  3.7-inch QF MG	Dec41	
Dec41 826  75mm PH (uk)	May45	
Jan30 10463  18pdr OQF	Dec40	
Jan40 1500  18/25pdr OQF	Dec41	
Jan40 25000  25pdr OQF	May45	
Jan08 499  4.5-inch QF H	Dec40	
Jan15 3359  6-inch BL I	Dec40	
Jan17 240  8-inch BL VIII	Dec40	
Jan14 632  9.2-inch BL	Dec40	

British Artillery Guns

Overview

The british possess a large number of wwii vintage guns, many of which were lost in France. They were also introducing the excellent 4.5-inch and 5.5-inch guns, Until the american supplied then with the long tom they still used the 7.2-inch. Late in the war they upgraded the chassis of the 7.2-inch.

Jan05 1756  60pdr II	Dec40	
Jan15 310  6-inch BL XIX	Dec40	
Jan38 72  4.5-inch BL I	Dec41	
Jan41 500  4.5-inch BL II	May45	
	May45	
Jan41 5000  5.5-inch BL III		
Jan40 240  7.2-inch BL I-IV	Dec43	
Jan42 350  155mm M2 (uk)	May45	
Jan43 240  7.2-inch BL VI	May45	
Jan44 24  7.2-inch BL V	May45	

British Artillery

Rocket & Mortars

Overview

While the british 2-inc mortar was an acceptable weapon, the 3-inch mortar suffered from a lack of range. This was resolved in 1942. At the same a time a heavier morrta was produced. Unlike the Germans the british did not put a focus on rocket artillery , but did possess an acceptable rocket artillery weapon.

Jan38 39288  2-inch Mortar			May45
Jan32 23513  3-inch Mortar			May45
Jan42 3800  4.2-inch Mortar			May45

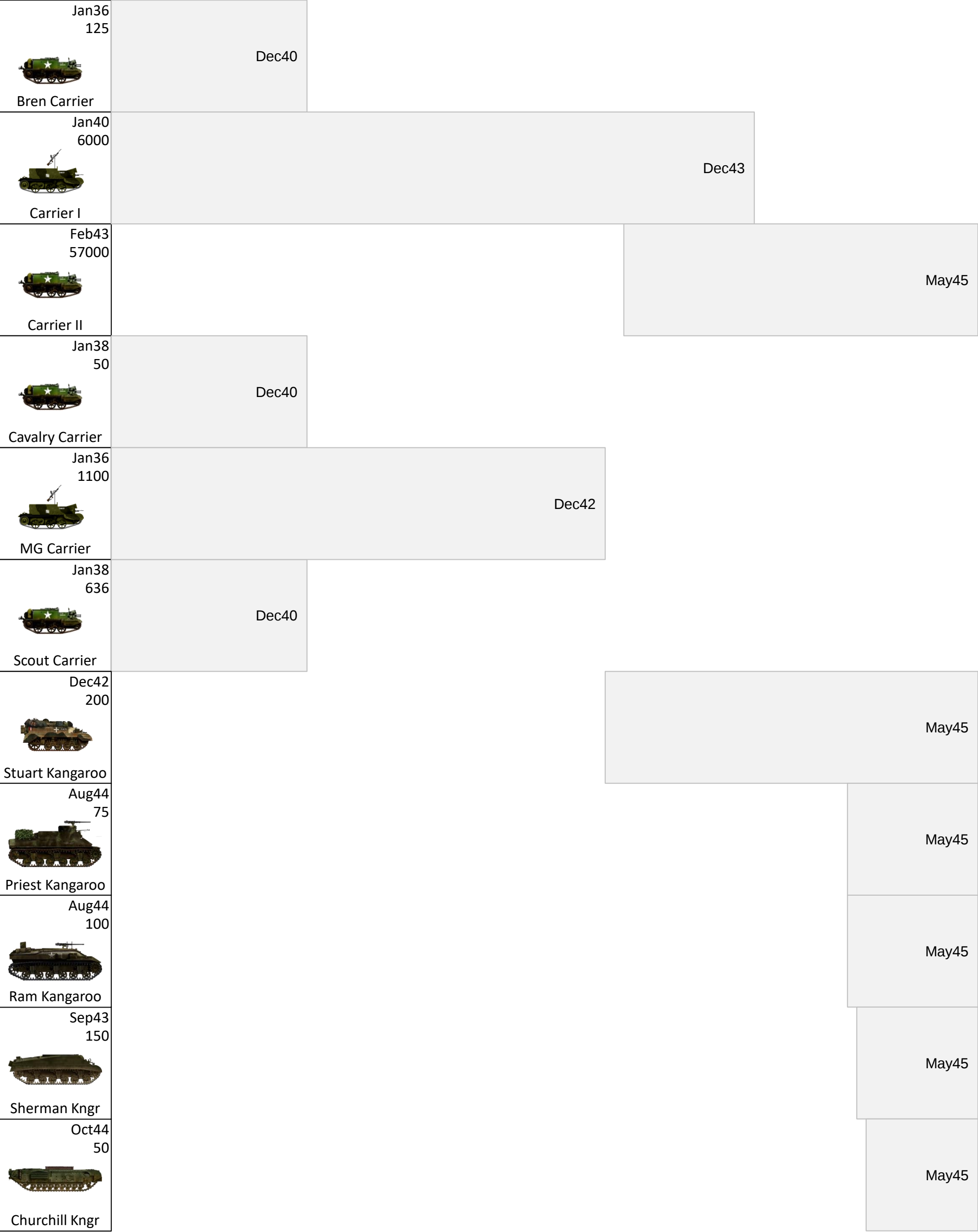
Jan44 400  Landmattress 16			May45
Jan44 400  Landmattress 30			May45

British Armoured Personal Carriers

Tracked

Overview

The british started the war with a wide range of bren carriers, but after dunkirk their was only one model. The british firstc reated ICV from stuaarts in the desert, but these were toio light to be useful. They were used forr econnaissance. The Canadians did the same with priests, and this was successful. The ICV was born.



British Armoured Personal Carriers

Half Tracked

Overview

The british also received carriers from the US, as well as amphibious vehicles and half tracks.

Jan44
7000



T16 Carrier

Jan44
1000



Buffalo LVT

May45
May45

Jan41
2000



M3A1

Jan41
2000



M2 HTC (uk)

Jan41
2000



M3 HTP (uk)

Jan41
7000



M5 HTP (uk)

Jan41
2000



M9 HTP (uk)

May45
May45
May45
May45
May45

GERMAN VEHICLES & ARTILLERY

GENERAL

The Germans used a number of world war I vintage weapons during the second world war, but the new weapons which provided decisive were all new. Germany had to almost comply built and arm its army in a short period of time, which required the manufacture of a wide range of weapons. The lessons of world war one were well understood and the Germans made some unique observations about tanks, insofar as communications was critical. As a result their tank, on paper, were no better than their opponents, but they all possessed a radio and a turret which could accommodate three men, a commander, a loader and a gunner. This allowed their, often inferior, tanks to decisively defeat their French equivalents.

The Germans also understood the importance of support weapons which were mobile. While they did not possess many in 1939, they created an effective armoured personal carrier, self propelled howitzer and self propelled assault guns. While these were not significant in 1939 and 1940, they provide very useful in 1941 and 1942.

TANKS

Apart from their communications and turret design, the German tanks which were available were not as good as the French and British tanks. The Pzkwf I and Pzkwf II were particularly inferior, although would still provide useful when faced by infantry which lacked anti-tank weapons. The Pzkwf III was adequate, but its gun could not penetrate the heavier allied tanks and its armour could be easily penetrated by the more modern anti-tank weapons. Luckily for the Germans the allies had a general lack of anti-tank weapons, but in the desert this problem became rather obvious. After meeting the T-34 the Germans were shocked and fast tracked the development of a tank, that quiet possibly, was the best tank of the war, the Panther. To fill the gap they upgraded the Pzkwf IV to the point where it could match the best the allies had to offer, but was certainly not superior. The Panther was clearly superior, but was often overshadowed by the more famous Tiger tank. A response to the KV-1, the tiger was an effective and feared weapon, but its high cost made its overall benefit dubious.

TANK DESTROYERS

When the Germans found themselves on the defensive they discovered that tank destroyers were very effective in defence, as well as being cheap to build. The Germans, as a result, built a bewildering array of tank destroyers.

ARTILLERY

The German Artillery was acceptable, but certainly not superior, to allied pieces. The Russian 122mm could out range the 15 cm howitzer, which caused the Germans great difficulties when conducting counter battery fire. The problems when facing the US or British was even more pronounced. While it could at least fire a much larger round than the British 25-pounder, 105mm v 88mm, the British would often possess many more tubes. Against the Russians, German artillery was clearly superior, based on their indirect fire utilisation, but against the British and Americans, they were inferior.

German Scout Cars

Jan 1933 to Dec 1942

Scout Cars were only a temporary measure until the Germans had Armoured Cars delivered, but they were used until the end of 1942 in a combat role and for support role, such as signal, beyond.

Jan33 147  Kfz 13	Dec42
Jan33 40  Kfz 14	Dec42 Signals

German Light Armoured Cars

4-Rad

Jan 1937 to May 1945

4 wheeled armoured cars were either armed with a MG or a 2 cm (or 2.8 cm) cannon. They were used during the entire war.

MG	Jan37 300  SdKfz 221/MG	May43	
	Mar38 90  SdKfz 222/MG	Dec41	
	Mar38 267  Sdkfz 223/MG	May43 Signals	
	Jan42 300  Sdkfz 223/I/MG	May45 Signals	

2 cm	Mar41 39  SdKfz 221/28	Dec41	
	Jan38 450  SdKfz 222/20	May45	
	Jan39 30  Sdkfz 223/20	Dec41	
	Jan33 21  Sdkfz 231/4r	Dec41	

German Heavy Armoured Cars

6-rad, 8-rad, Half-Track and Tracked

Jan 1933 to Dec 1943

The 6 wheel armoured cars were the primary heavy armoured car of the early war period, the six wheeled layout proved to be unsatisfactory and they were replaced before the end of the war with the 8 wheel version. On the eastern front even the 8-wheel armoured car was not mobile enough and was replaced with a half-track

2 cm	Jan33 928  Sdkfz 231/6r	Dec43	
	Jan38 600  Sdkfz 231/8r	Dec43	
	Dec40 635  Sdkfz 231/8r/I		May45
	Jan33 151  Sdkfz 232/6r	Dec42 Signals	
	Jan38 60  Sdkfz 232/8r	May43 Signals	
	Dec40 65  Sdkfz 232/8r/I		Dec44 Signals
	Jan44 200  SdKfz 234/1		May45
	Jul41 737  SdKfz 250/9	May45	
	Jul41 20  Sdkfz 251/23	Dec44	
	Feb44 70  Aufklärer 38t/20		May45
5 cm	Jan44 101  SdKfz 234/2		May45 (5 cm)

German Light Tank

PzKfw I

July 1938 to December 1941

The Panzer I was withdrawn from combat at the end of 1941 and beginning of 1942, several attempts to make specialist vehicles were attempted, but few were built or converted.

MG	Jul32 818  Pz IA	Dec41
	Aug38 675  Pz IB	Dec41
	Jul42 40  Pz IC	
	Jul42 2  Pz ID	
	Apr42 30  Pz IF	

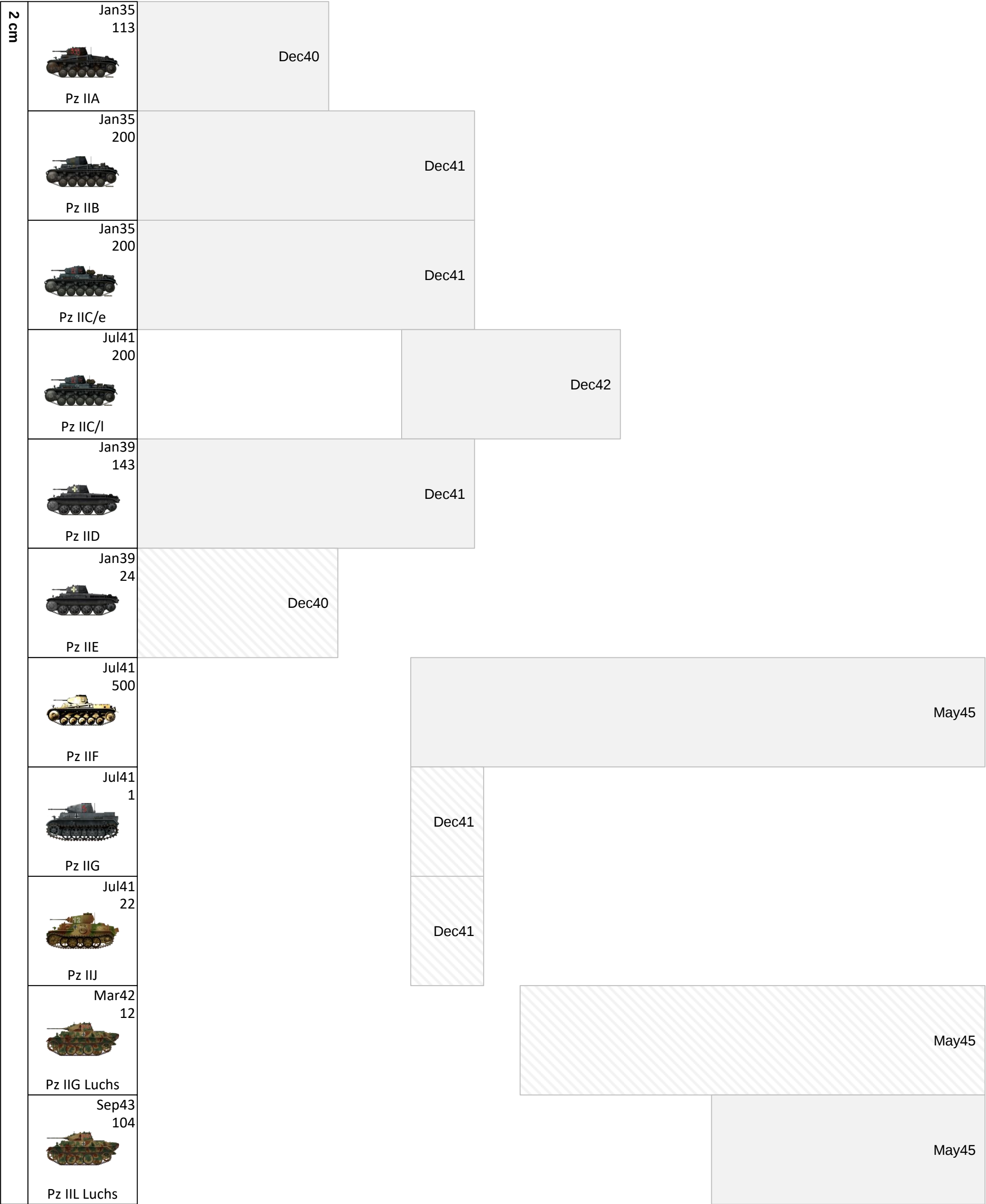


German Light Tank

Pzkfw II

Overview

The Pzkfw II was considered obsolete by the end of 1941, but was still used in reconnaissance roles until the end of the war. The Germans reworked the vehicle to create the Ausf F, a precursor to the Luchs. The Luchs was probably the best light tank of the war, apart from the American M24 LT.



German Light/Medium Tank

Pzkfw 35(t) & 38(t)

Overview

BY the end of 1941 it obvious the 35(t) and 38(t) tanks were obsolete. An attempt was made to upgrade them in 1941 and these vehicles continued to be used until 1943, but normally in secondary theatres or against the British in North Africa.

3.7 cm	Jan39 434  Pz 35(t)	Jun42	
	Jan39 150  Pz 38(t) A	Dec41	
	Jan39 110  Pz 38(t) B	Dec41	
	Jan39 110  Pz 38(t) C	Dec41	
	Jan39 105  Pz 38(t) D	Dec41	
	Apr41 90  Pz 38(t) S	Dec41	
	Apr41 275  Pz 38(t) E	May43	
	Apr41 250  Pz 38(t) F	May43	
	Apr41 321  Pz 38(t) G	May43	

German Medium Tank

Pzkwf III (3.7 cm)

Overview

When the Germans invaded Russia it was discovered the Pzkwf III needed significant upgrading in order to hold their own against the T-34, this was very evident in 1942. The Germans urgently upgraded the main gun to 5 cm in early 1942, although the upgrading of existing tanks took longer.

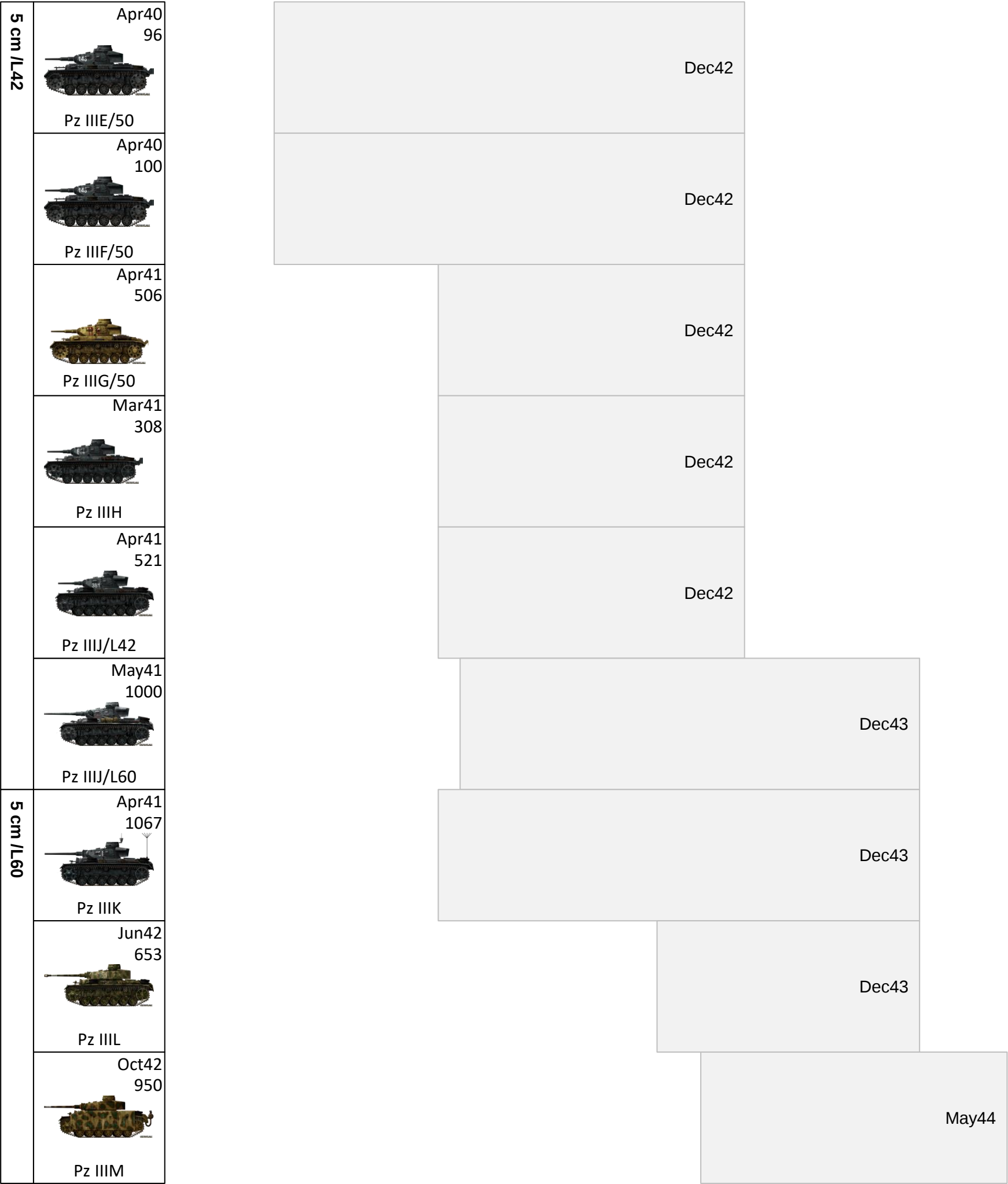
3.7 cm	Jan37 15  Pz IIIA	Aug40	
	Jul37 15  Pz IIIB	Aug40	
	Nov37 15  Pz IIIC	Aug40	
	Jan38 30  Pz IIID	Aug40	
	Dec38 96  Pz IIIE/37	Mar42	
	Sep39 435  Pz IIIF/37	Mar42	
	Apr40 94  Pz IIIG/37	Mar42	

German Medium Tank

Pzkfw III (5 cm)

Overview

When it was determined the 3.7 cm was not sufficient the PzKwz III was upgraded to the 5 cm L/42 and later to the 5 cm L/60. This allowed it to penetrate the frontal armour of the T-34, but the major short coming of the PzKwz III was its lack of armour, which was clear during the battle of Kursk. It was generally phased out by mid 44.



German Medium Tank

Pzkfw IV & PzKfw V (Panther)

Overview

Once the Pzkfw III was determined as not suitable as a main battle tank, the Pzkfw IV was quickly armed with a long barrel 7.5 cm gun to replace it. The new Pzkfw IV provided itself the equal of the T-34/76 and Sherman and filled the gap until the Panther could be produced in sufficient numbers. Both were used in the Panzer Divisions.

7.5 cm L/48	Feb42 175  Pz IVF2
	Mar43 119  Pz IVF2/s
	Mar42 1275  Pz IVG
	Mar43 412  Pz IVG/s
	Jun43 3125  Pz IVH
	Mar44 1435  Pz IVJ



7.5 cm L/70	Mar43 842  Panther D
	Aug43 2192  Panther A
	Mar44 2953  Panther G



German Heavy Tank

Pzkw VI (Tiger)

Overview

After facing the KV-I in mid 1941 the Germans were determined to field a heavy tank, which became the Tiger. This proved to be an effective weapon which gave the allies great concern, but the cost was very high.

Apr42 1347  Tiger I
Feb44 442  Tiger II/h
Feb44 50  Tiger II/p

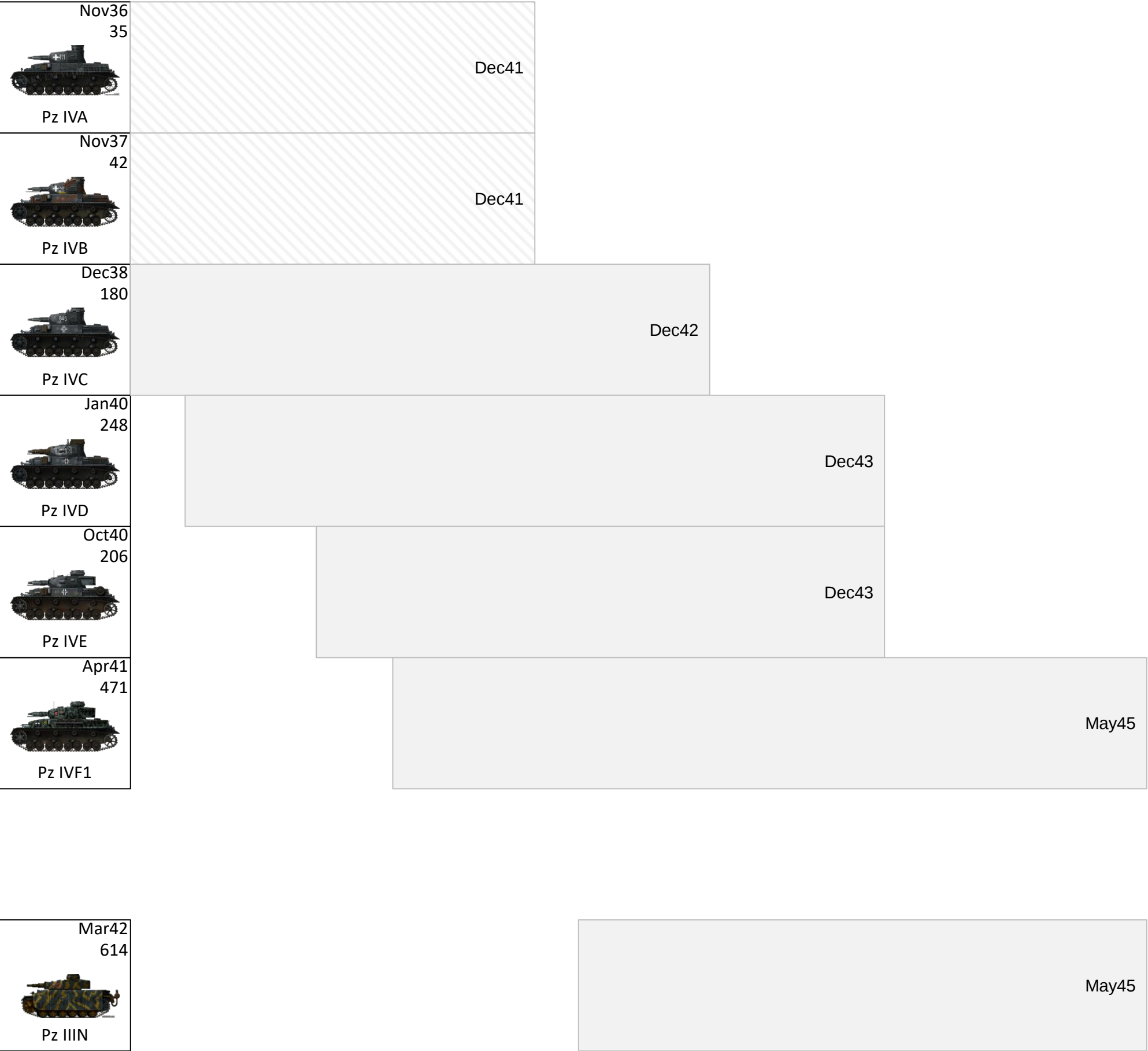
		May45
		May45
		May45

German Close Support Tanks

Pzkfw IV & Pzkfw III

Overview

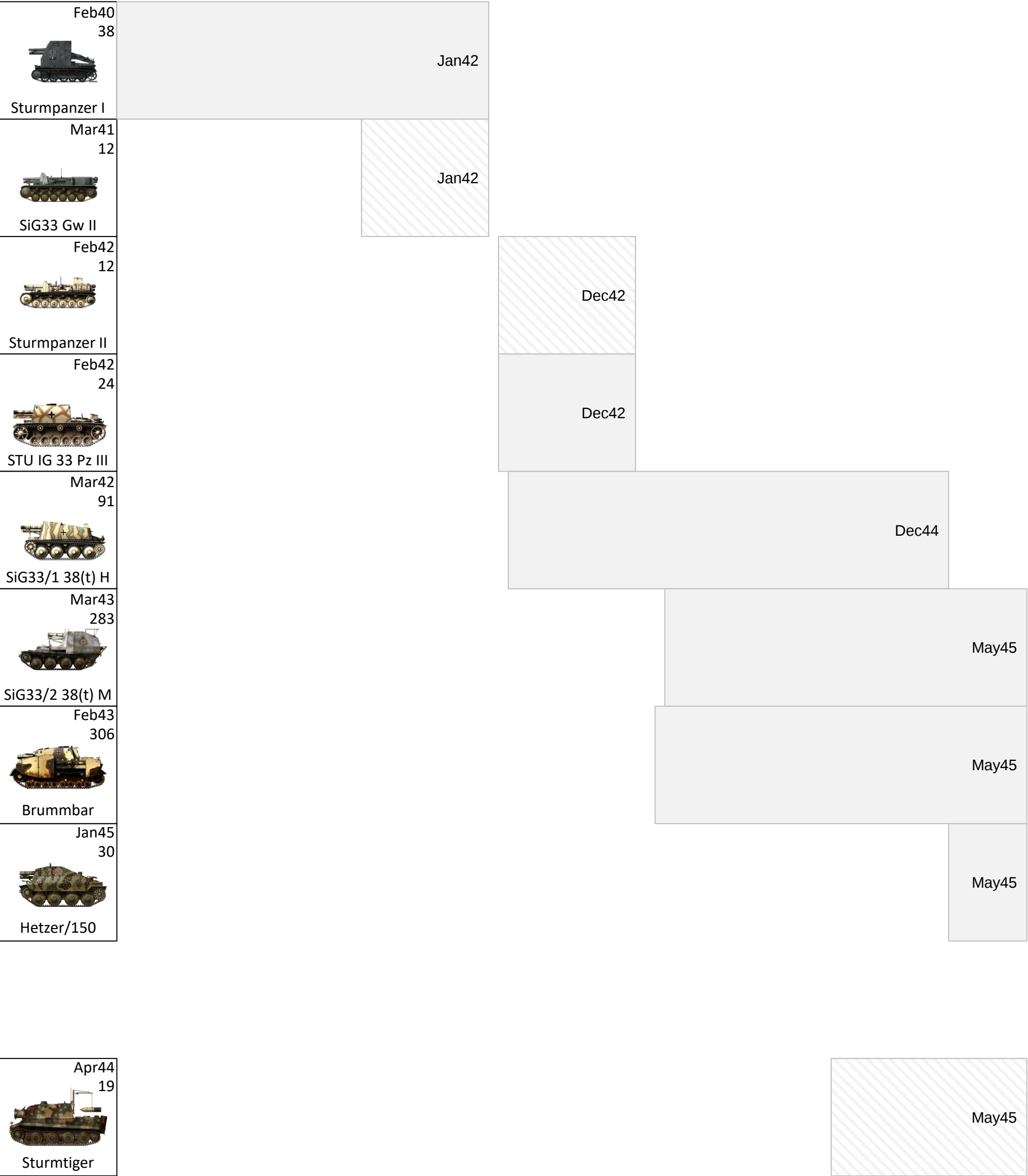
The Pzkfw IV was originally designed to be a close support tank, but once it was changed to become the main battle tank of the German army, the Germans switched to the Pzkfw III chassis to provide it was a close support tank.



German Self propelled Howitzers (Assault Guns) 15 cm or larger.

Overview

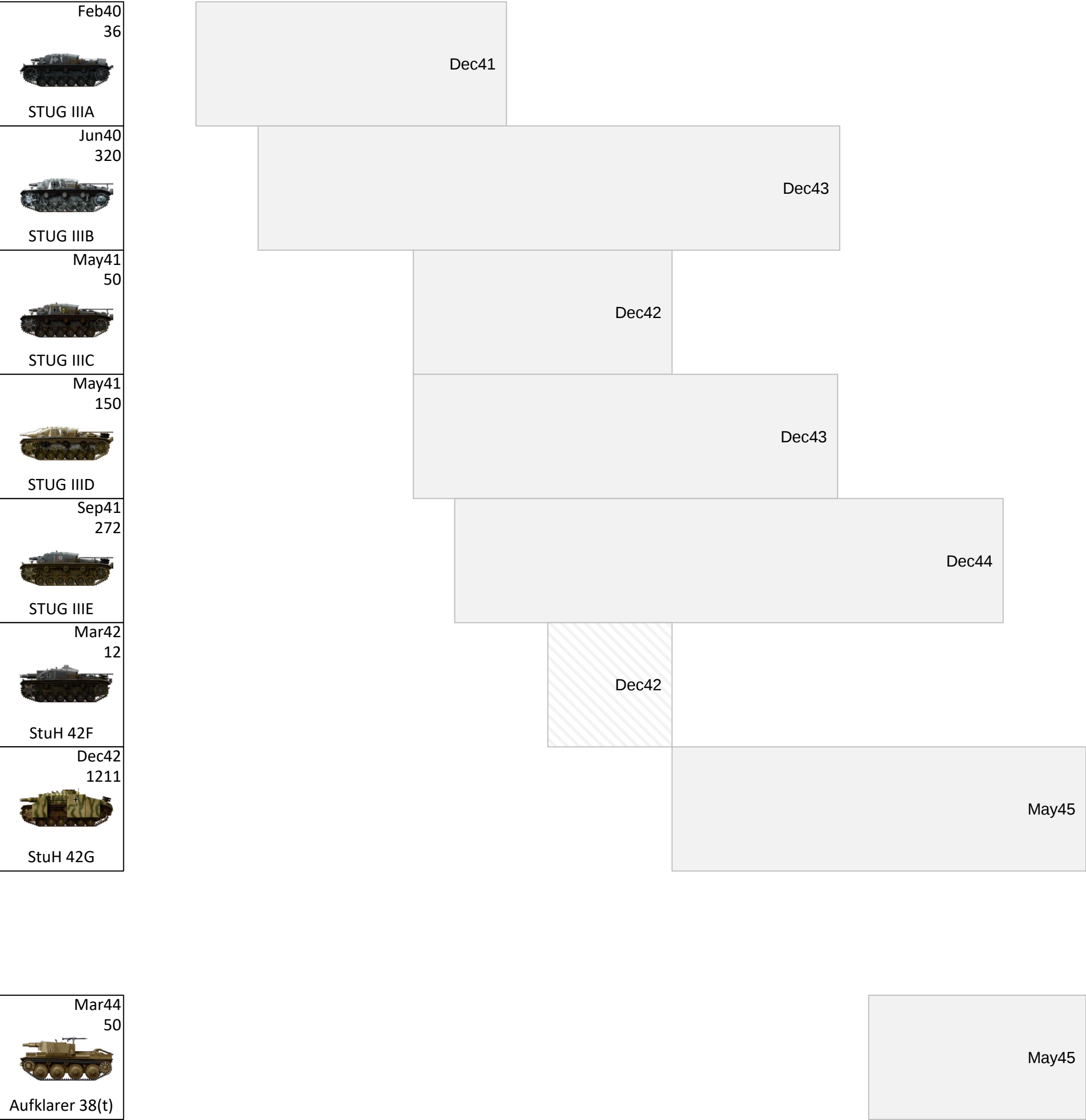
Assault guns were normally deployed to support infantry. Before 1942 they were only available in small numbers, but with the SiG33/2 and Brumbär became a standard component of any infantry attack. The 15 cm gun in an armoured vehicle was very effective against prepared infantry positions.



German Self propelled Howitzers (Assault Guns) 7.5 cm & fully tracked.

Overview

Assault guns were normally deployed to support infantry. The 7.5 cm gun was highly effective against infantry in prepared positions. With the advent of a HEAT round these weapons were often used in an anti-tank role, but were not very effective due to lack of accuracy.



German Self propelled Howitzers (Assault Guns)
7.5 cm & wheeled or half tracked.

Overview

In order to provide howitzer support for the reconnaissance formations a wheeled and half track assault gun was used. Never in any great number and generally restricted to reconnaissance formations, they provided useful when attacked prepared infantry positions. The half tracks were normally used on the eastern front.

Feb41
119



SdKfz 233/8r

May42
109



SdKfz 251/9

Oct43
99

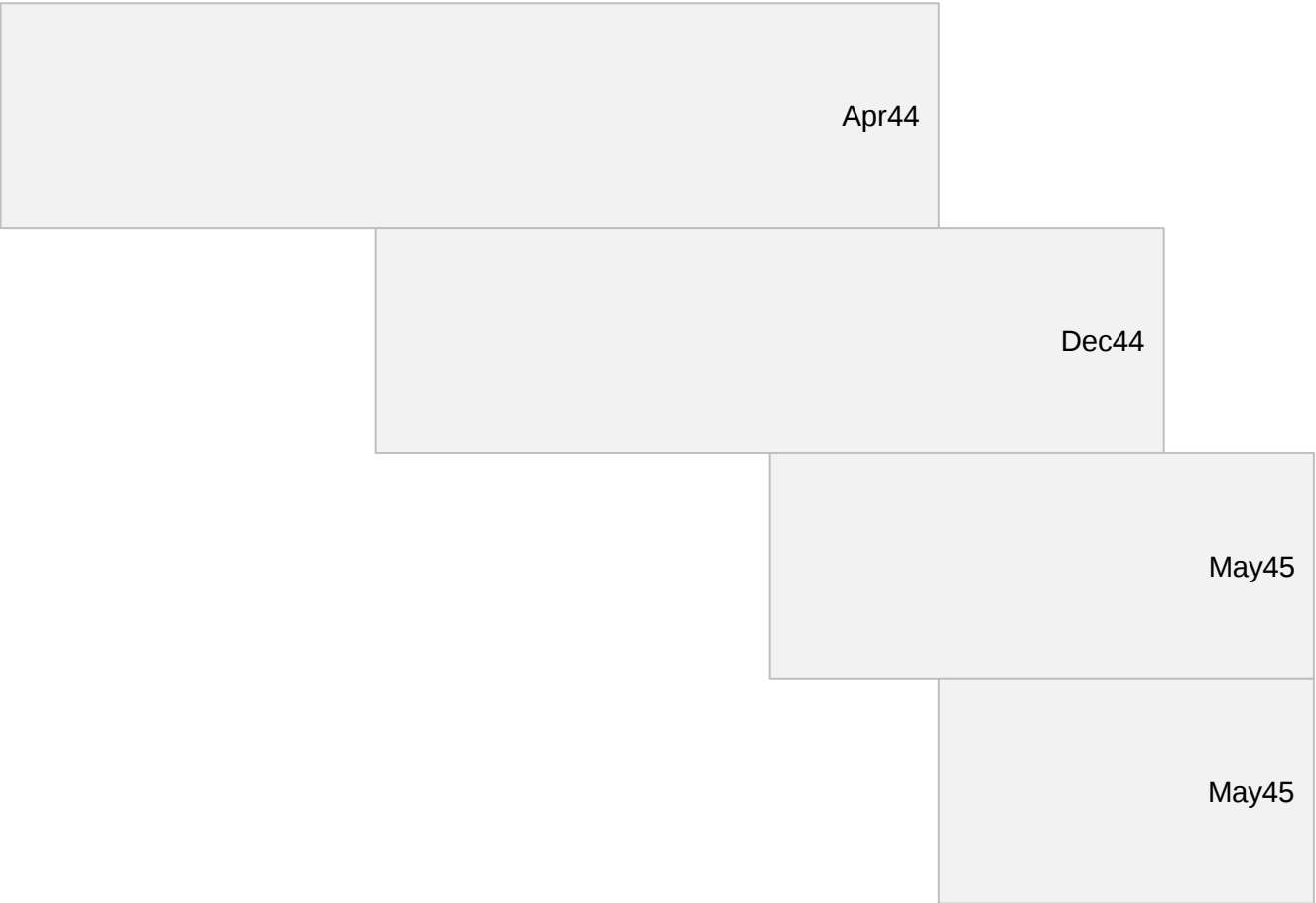


SdKfz 250/8

Mar44
88



SdKfz 234/3



German Tank Destroyers

STuG & Hetzer

Overview

As the only armour available to the infantry the Stug III's were quickly pressed into the tank destroyer role. The short barrel 7.5 cm was unsuitable and a long barrel 7.5 cm was fitted to this chassis creating an excellent tank destroyer. The long and short barrel Stug's were normal mixed into the same formation giving it good anti-tank and anti-infantry capability. The Hetzer's were also allocated to the infantry divisions and were very effective.

Feb42
111



STUG IIIF/L43

Jun42
144



STUG IIIF/L48

Sep42
250



STUG IIIF/8/L43

Mar42
8432



STUG IIIG

Feb43
1108



STUG IV

Mar44
2827

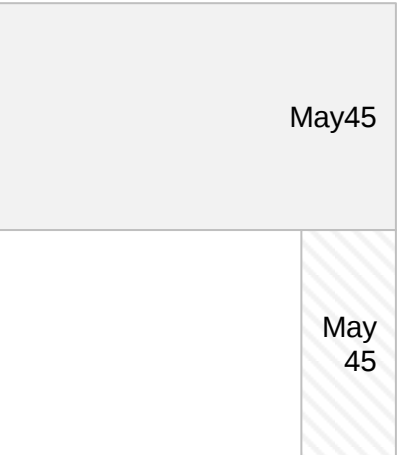
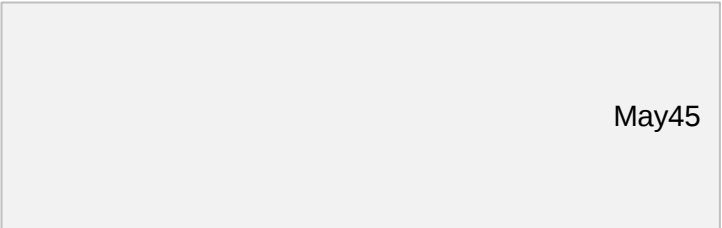
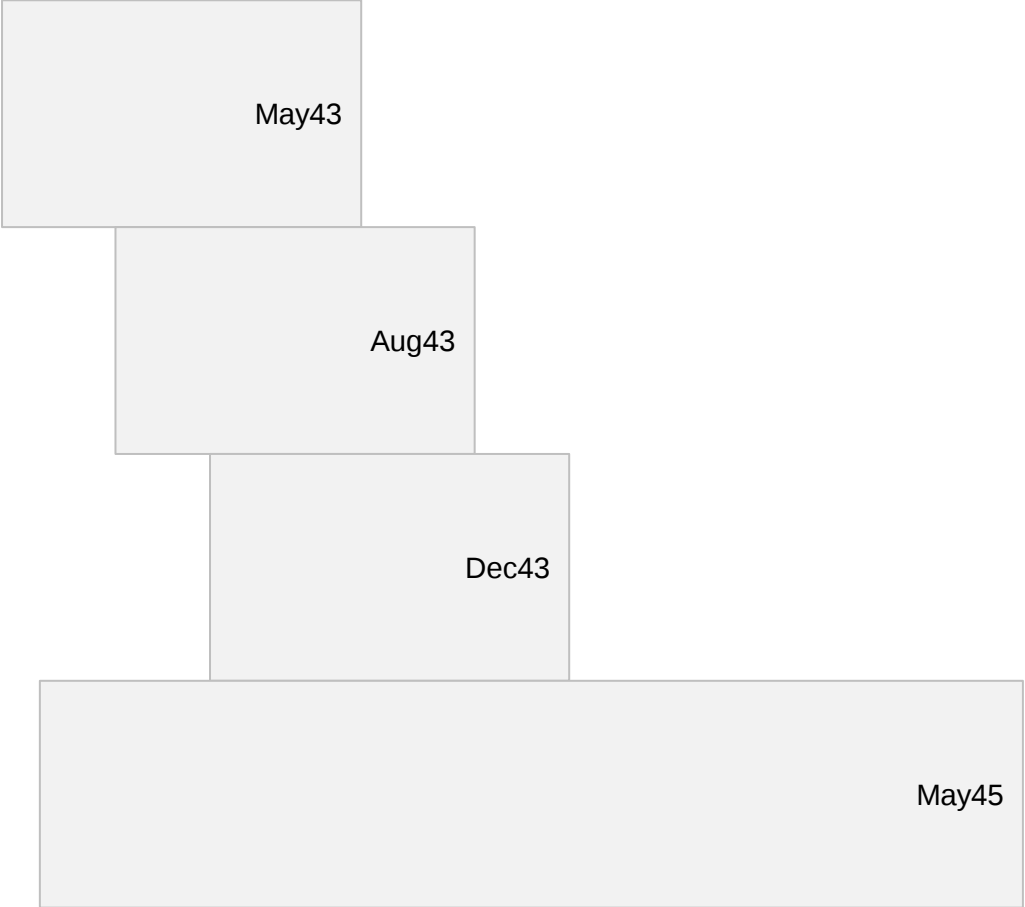


Hetzer

Mar45
1



Hetzer/L70

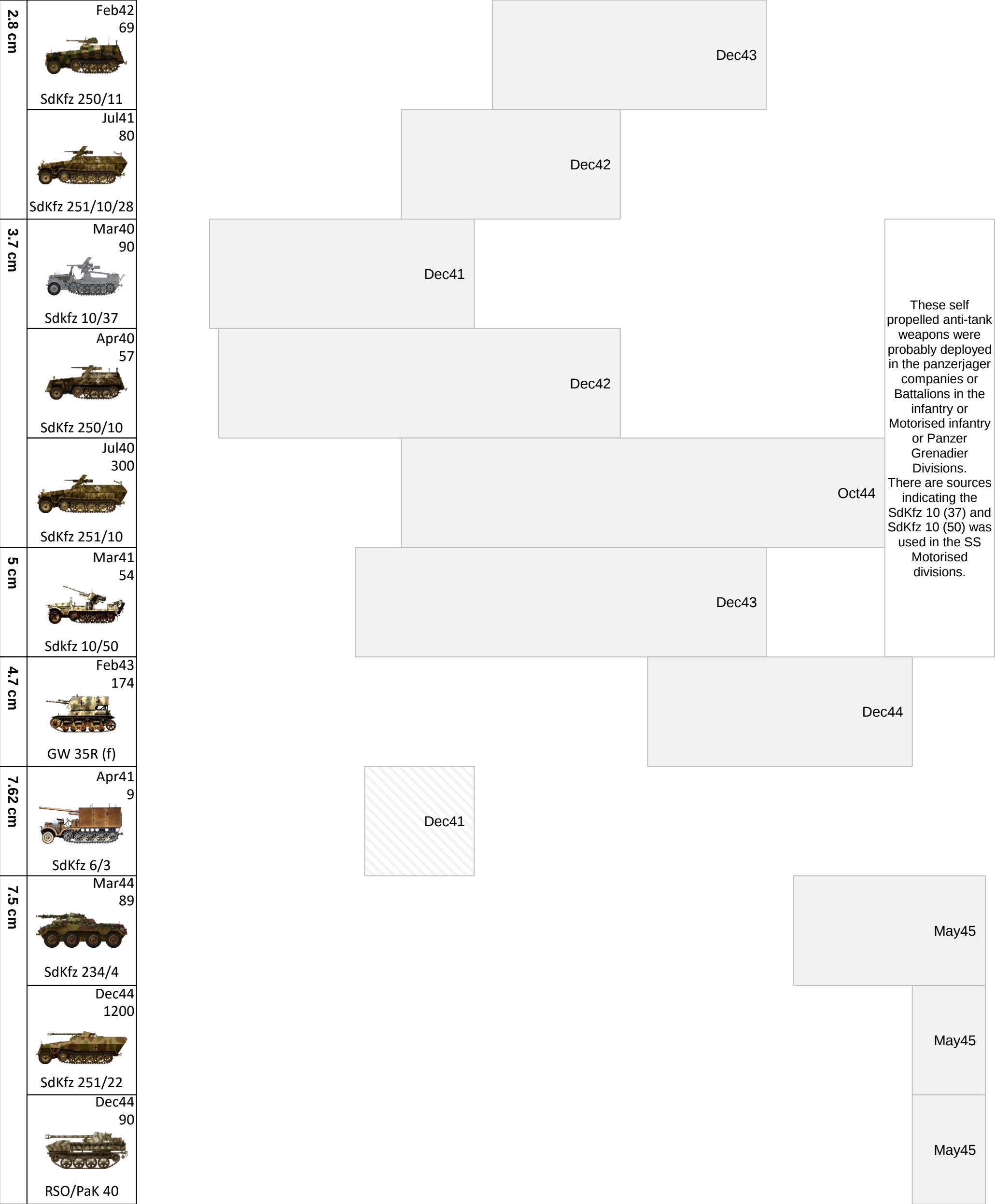


German Tank Destroyers

Half Track & Wheeled

Overview

The simplest tank destroyer was an anti-tank gun mounted on a flat bed vehicle, such as a half track. As a result a range of these vehicles were constructed as a low cost tank destroyer. A range of reconnaissance vehicles were also constructed to support the reconnaissance formations.



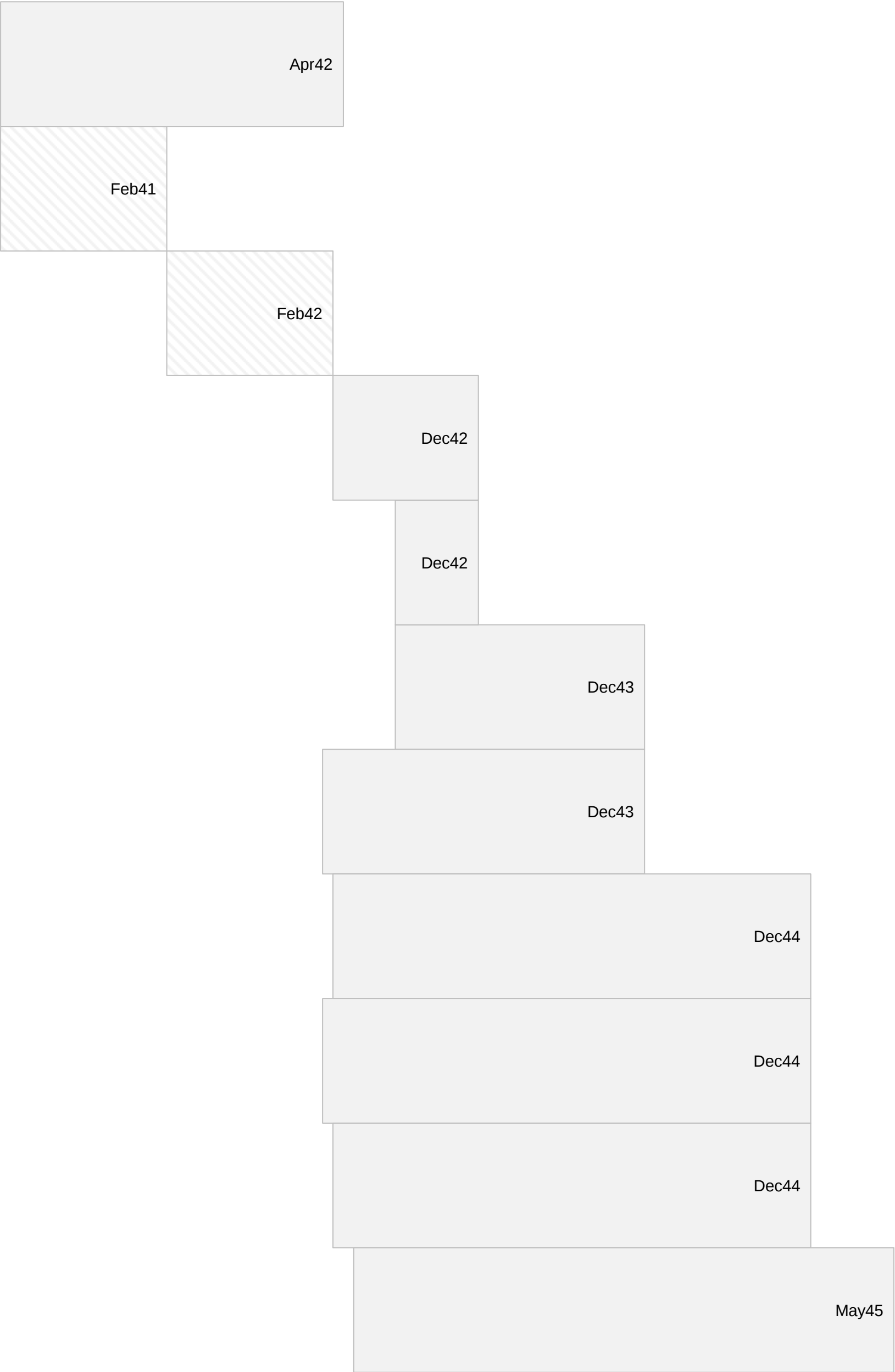
German Tank Destroyers

PanzerJager (Light & medium)

Overview

The Panzerjager were a low cost solution anti-tank solution and the Panzerjager I's were effective until they met the Russian armour. The Germans quickly took their 7.5 cm and captured Russian 7.62 cm guns and placed them on captured French tanks, creating the Marder I's. The Marder II and III were based on more modern chassis.

Feb40 202  PzJg IB/47
Feb40 20  PzJg IB/37
Feb41 20  PzJg IB/50
Feb42 24  Marder I/39H
Jul42 10  Marder I/FCM36
Jul42 170  Marder I/LrS
Jan42 201  Marder II 131
Feb42 576  Marder II 132
Jan42 344  Marder III
Mar42 275  Marder IIIM
Apr42 942  Marder IIIM



German Tank Destroyers

PanzerJager (Heavy)

Overview

As the Russians developed more powerful tanks, the Germans responded by creating heavy tank destroyers. Apart from the Nashorn, which was mainly designed as a mount for the 8.8 cm L/70, the heavy tank destroyers all possess an excellent gun and excellent armour protection.

7.5 cm	Jan44 784  JagdPz IV
	Apr44 940  JagdPz IV/70
	Aug44 278  JagdPz IV/70Z
8.8 cm	Apr42 473  Nashorn
	Feb44 415  Jagdpanther
	Jul43 48  Elefant
	Jul43 91  Ferdinand
12.8 cm	Mar44 88  Jagdtiger

German Self propelled anti-aircraft

Overview

While the Germans maintained air supremacy until 1943, formations were always well equipped with anti-aircraft guns. Due to the requirement for mobility, placing anti-aircraft guns on half tracks was obvious and the Germans developed a wide range of these vehicles. As the war progressed they started armouring the vehicles.

[illegible]

German Self propelled anti-aircraft 3.7 cm & 5 cm

Overview

As the war progressed and the Germans lost air supremacy, the focus was on larger anti-aircraft guns mounted in heavier armed vehicles.

3.7 cm	Jan42 399  Sdkfz 6/2/37
	Mar42 500  SdKfz 7/2/37
	Mar42 500  SdKfz 7/2/a/37
	Mar44 339  Maultier/37
	May44 200  Sdkfz 4/37
	May44 250  Sdkfz 4/a/37
	Mar44 125  sWS auf 37mm
5 cm	Jan42 20  Sdkfz 6/2/50

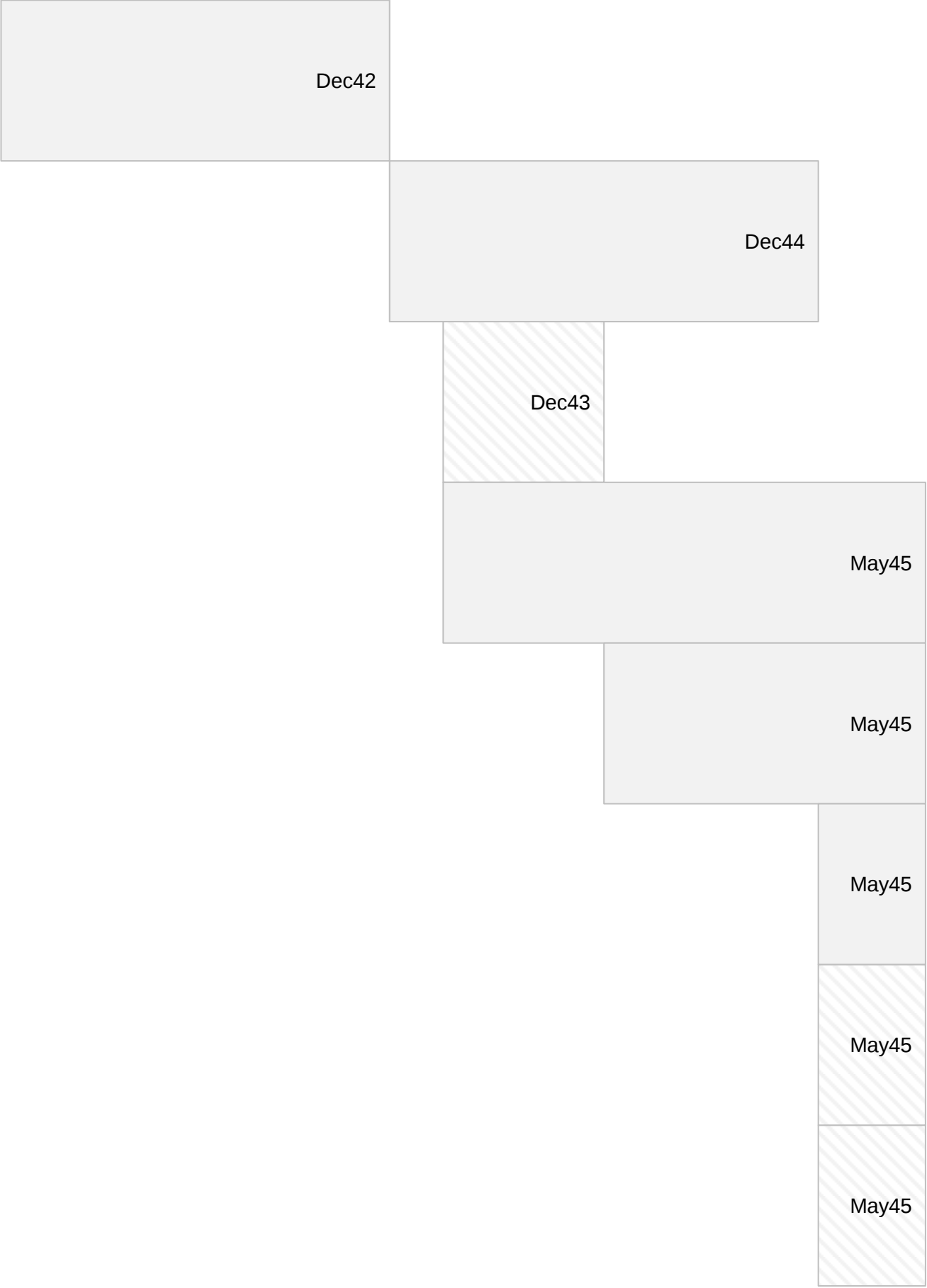


German Self propelled anti-aircraft Fully Tracked

Overview

The Germans quickly discovered only fully tracked vehicles could keep up with tracked vehicles, so they began to experiment with mounting a.a. on fully tracked chassis. By mid-43 the need was urgent so a number of different weapons were developed. Late in the war a fully enclosed self propelled a.a. vehicle was developed, but was never put into production.

Mar41 24  Flakpanzer I
Jan43 141  Flakpanzer 38(t)
Apr43 10  Möbelwagen 20
Apr43 240  Möbelwagen 37
Jan44 105  Wirbelwind
Jan45 45  Ostwin
Jan45 5  Zestorer
Jan45 2  Kugelblitz

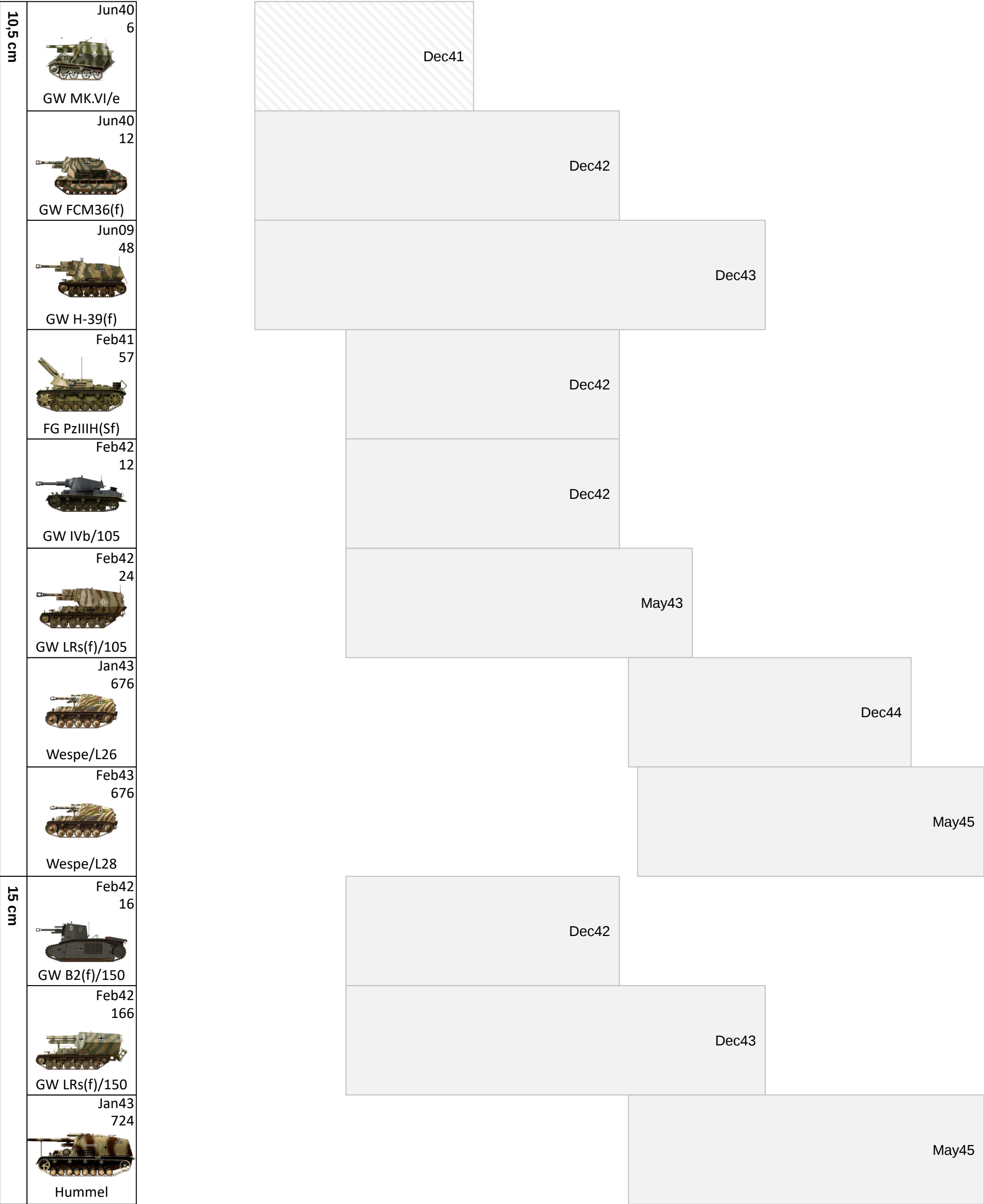


German Self-Propelled Artillery

Howitzers

Overview

The Germans always intended to give their Panzer Divisions fully tracked howitzers, but between 1940 and 1942 only ad-hoc vehicles based on captured tanks were available. From 1943 to the end of the war the Germans produced the excellent wespe and hummel.



German Self-Propelled Artillery Rocket Launchers

Overview

After seeing the effectiveness of rocket artillery the Germans developed a self-propelled version. Initially based on captured enemy vehicles or half tracks, by 1943 a highly effective self-propelled rocket artillery vehicle was developed. The Germans also deployed portable rocket launchers, which could fit on any half track.

Jan41 50  sWf40/28 auf Renault
Jan42 48  sWf40/28 auf Sdkfz251
Jan42 48  sWf40/32 auf Sdkfz251
Mar43 589  Sdkfz 4/1
Feb44 825  sWS auf 15cm



German Self-propelled Artillery Mortars

Overview

The Germans developed two excellent self propelled mortars, which remained in service for the entire war.

Jun40
425



SdKfz 250/7/1

Nov40
400



SdKfz 251/2

	May45
	May45

German Anti-Tank Gun

2.8 cm, 3.7 cm, 4.2 cm, 4.7 cm, 5 cm

Overview

As armour increased the size of anti-tank guns increased, as a result there was a lot of change with this weapon class. Anti-Tank guns suffered very heavy losses in defeat, so production was high in order to ensure a sufficient supply. By Dec 42 these guns were obsolete, although some were still used against light targets up to the end of the war.



German Anti-Tank Gun

7.5 cm, 7.6 cm, 8.8 cm & 12.8 cm

Overview

By January 1942 the Germans had to start using 7.5 cm, or larger, anti-tank guns to keep up with enemy armour improvements. A large number of captured guns were used in this role, but the Pak 40 was the mainstay of the anti-tank forces until the end of the war.

Dec41 150  7.5 cm Pak 41
Jan42 20000  7.5 cm Pak 40
May42 3712  7.5 cm Pak 97/38(f)
Jan42 560  7.6 cm Pak 36(r)
Dec42 160  7.6 cm Pak 39(r)
Jan43 253  7.5 cm Pak 42
Feb43 2100  8.8cm Pak 43/41
May43 2100  8.8 cm Pak 43
Jan45 51  12.8 cm Pak 44



German Anti-Aircraft Guns

MG, 2 cm & 3.7 cm

Overview

The German produced an enormous number of anti-aircraft guns, which considering the allies air force is no surprised. The MG and 2cm a.a. guns became increasingly obsolete as the war progressed, but received a new lease of life in twin and quad configuration. The 3.7 cm was never as popular, but more effective against high speed aircraft.

 Jan36 MG 34 AA	Dec42	
 Jan42 MG 42 AA		May45
 Jan34 10000 2 cm Flak 30	Dec42	
 Jan40 144000 2 cm Flak 38	May45	
 Dec40 40000 2 cm FlakV 38	May45	
 Jan42 3851 2 cm GebFlak 38	May45	
 Jan34 100 3.7 cm Flak 18	Dec41	
 Jan36 243 3.7 cm Flak 36	Dec41	
 Jan37 10000 3.7 cm Flak 37	May45	
 Jan44 7216 3.7 cm Flak 43	May45	
 Jan44 390 3.7 cm Flakz 43	May45	

German Anti-Aircraft Guns

5 cm, 8.8 cm , 10.5 cm and 12.8 cm

Overview

The creation of twin and quad 2 cm and 3.7 cm meant the 5 cm never gained popularity, but the 8.8 cm was the backbone of the medium anti-aircraft gun force for the entire war. The 10.5 cm and 12.8 cm were mainly used in static positions defending the cities.

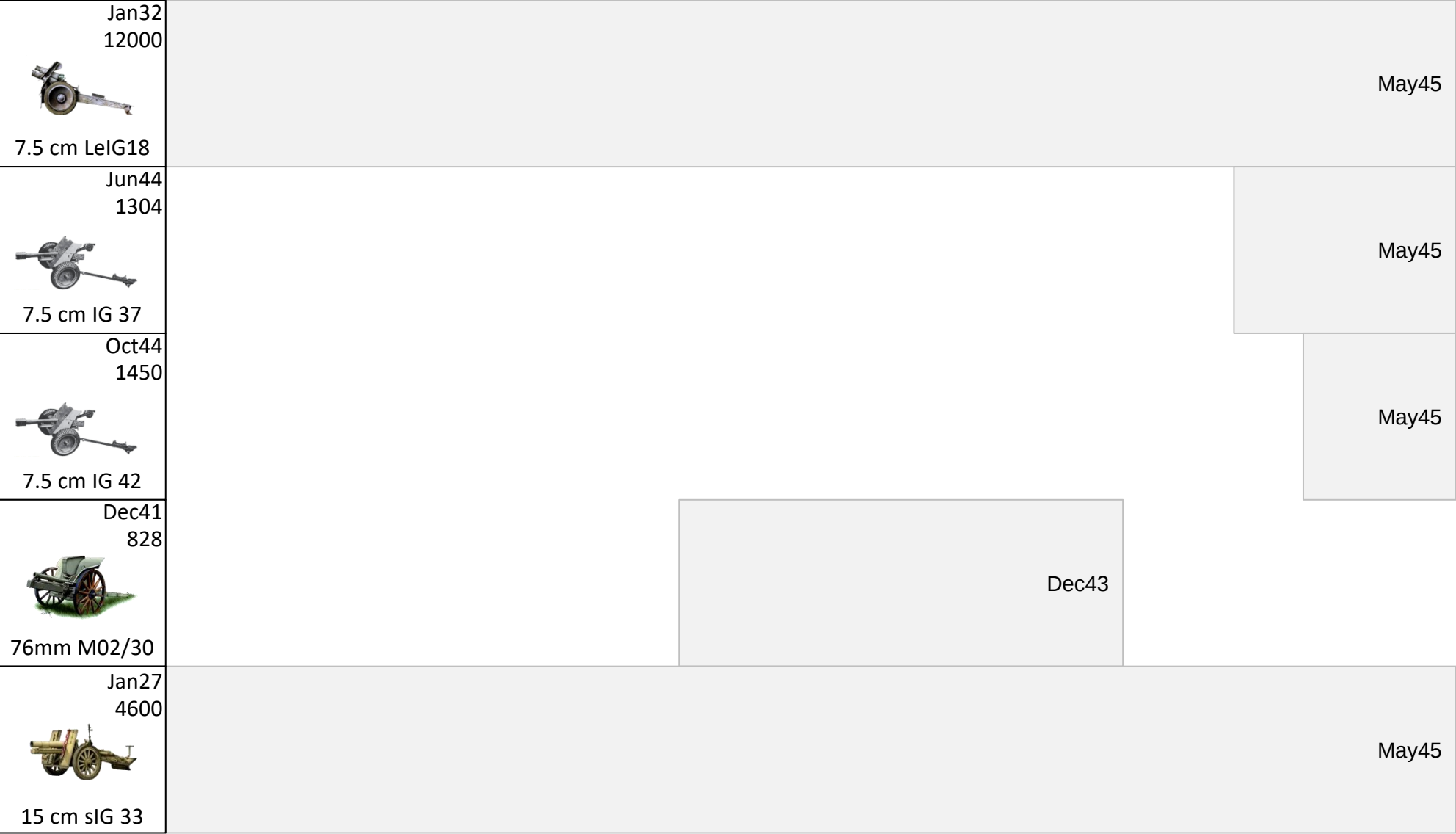
Jun41 200  5 cm Flak 41	Dec43	
Jan33 310  8.8 cm Flak 18	Dec41	
Jan36 10000  8.8 cm Flak 36	May45	
Jan37 11000  8.8 cm Flak 37	May45	
Jan43 308  8.8 cm Flak 41		May45
Jan38 4200  10.5 cm Flak 38	May45	
Jan42 1125  12.8 cm Flak 40		May45

German Artillery

Infantry or Regimental Guns

Overview

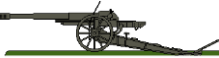
The Germans used infantry guns more than most other armies, who primarily relied on mortars. They were heavy and expensive, but were very effective in a direct fire role, which mortars could not duplicate. By 1944 the Germans were running out of 7.5 cm infantry guns, so they start manufacturing new one, in limited numbers.



German Artillary Guns

Overview

The Germans possessed a number of older guns, which were allocated to quiet sectors. By 1944 these weapons were being used on the front line. The Germans also captures a number of guns from the Russians.

Jan30 3000  7.5 cm FK 16nA			May45
Jan38 180  7.5 cm FK 18			May44
Jan39 144  7.5 cm FK 38			May44
Feb42 560  7.6 cm FK 36(r)			May44
Jan34 1500  10cm K 18			May45
Dec42 828  107mm M30g			May44
Jan38 101  15 cm K 18			May45
Jan41 338  17cm K 18			May45

German Artillery

Overview

The German 10.5 cm was an adequate howitzer which served the Germans for the entire war. The Germans upgraded this weapon during the war which provided minimal benefits. Close to the end of the war the Germans began to use the older WWI vintage howitzers, which were far from adequate.

 Jan38 1193 7.5 cm GeBG 36			May45
 Jan14 480 10 cm M. 14 Feldhaubitze	Dec43		
 Jan36 6986 10.5cm LeFH18	May45		
 Jan39 393 10.5cm leFH 18/39	Dec43		
 Dec41 10286 10.5cm leFH 18/40	May45		
 Dec41 6983 10.5cm LeFH18M	May45		
 Jan42 420 10.5cm GeBG 40	Dec44		

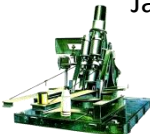
German Artillery

Howitzers 15 cm and larger

Overview

The German 15cm howitzer had a major issue, lack of range. It was often outranged by the Soviet 122mm howitzer and would have been outranged by the American 155mm. Several attempts to extend range was made, with a varying degree of success. The most interesting one was to sue of RAP ammunition, the first use of this type of projectile.

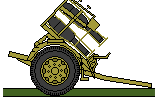
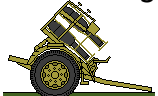
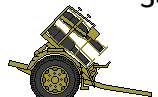
 Jan34 5403 15cm sFH18			
 Jan41 42 15cm sFH18/40			Dec41
 Feb42 120 15cm sFH18M			Dec43
 Jan36 480 15cm sFH 36	Dec42		

Jan39 711  21cm M18	May45
Jan11 21  30.5 cm M1911	May45

German Artillery Rocket Launchers

Overview

The Germans had developed a range of rocket launchers in 1941, but it was only after the Russian invasion that the Germans put a major focus into these weapon systems. The most common launchers were the 15 cm, 21 cm and 30 cm.

Jan41 5283  15cm Wf41/6
Jan41 345  28/32cm Wf41
Jan41 345  28cm sWf41/5
Jan41 345  28cm sWf41/1
Jan41 345  28cm Wf40/5
Jan41 345  32cm Wf41/1
Jan43 954  30 cm Wf42/6
Feb43 2626  21cm Wf42/5

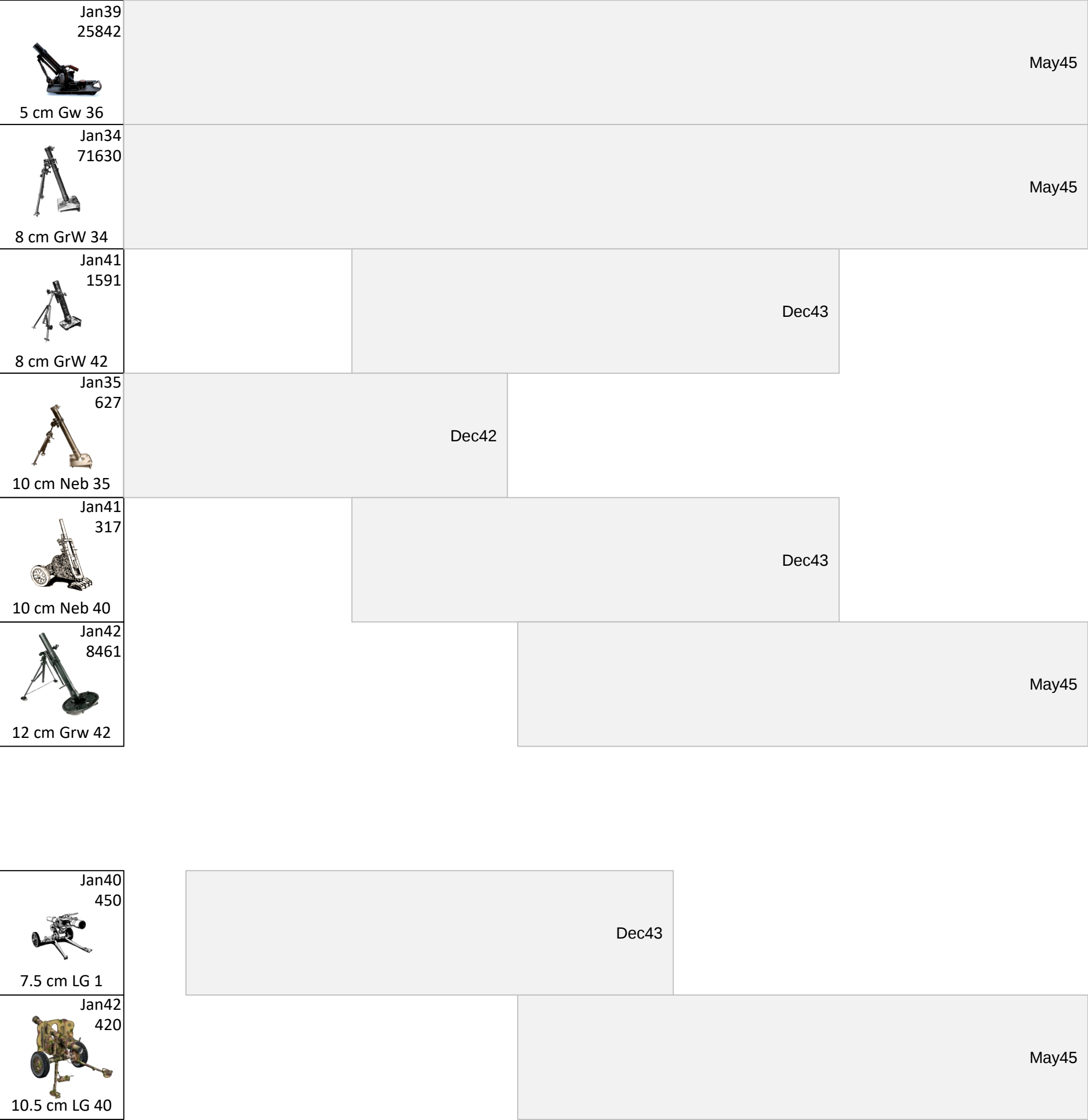
		May45
	Dec43	
	Dec43	
	Dec43	
	Dec43	
	Dec43	
		May45
		May45

German Artillery

Mortars & Recoiless Guns

Overview

The Germans started the war with the excelent 8cm mortar, as well as the less than useful 5cm mortar. Deemed obsolete by 1943, the 5 cm was still sued by the infantry due to its lightness. As the war progressed the size of the mortars increased, especially after the Germans saw how effective the Russian 120mm mortar was.



German Armoured Personal Carriers

Half Tracks

Overview

The Germans fielded two excellent armoured personal carriers, the SdKfz 250 and SdKfz 251. Both served to the end of the war and was used as a chassis for many conversions. The Germans were unique in that their infantry fought from their APC's, especially on the eastern front.



ITALIAN VEHICLES & ARTILLERY

GENERAL

The major issue Italy has was a lack of a sufficiently large manufacturing base to produce everything that was required for a modern army to operate. It also lacked the resources. However, considering the lack of resources, manufacturing capability and money, it did a surprisingly good job. It had a number of excellent designs, such as its medium anti-aircraft gun and some artillery pieces, but in other areas its equipment was obsolete. The Germans lacked the resources to provide enough assistance to resolve these issues, but German equipment did help a great deal. The Italians also came to the conclusion they could only support a small number of modern divisions, and by focusing on this smaller force it was able to stay in the game.

TANKS

Most of the tanks Italy started the war with were obsolete. The tankettes in particular were almost useless. Luckily for the Italians the British had major problems with tanks as well, so their better tanks could meet the British. However the desert war was not a tank v tank war, normally it was tanks v anti-tank guns, so the Italian tanks could still prove useful to Rommel.

TANK DESTROYERS

While the Italian tanks were not satisfactory the Italian mounted a large gun on their tank chassis to create a tank destroyer, this was a very useful weapon. The Italians at one stage equipped an armoured division with these tank destroyers. These weapons could meet the British tanks on an equal, or sometime superior footing. However tank destroyers were normally not as effective in attack..

ARTILLERY

The Italians had an excellent anti-aircraft guns, the 20mm and 90mm. The problem they had was producing enough of these weapons and as a result they often supplemented their strength with German 8.8 cm anti-aircraft guns. The anti-tank guns were less than satisfactory, which was why they used German 8.8 cm anti-aircraft guns. The rest of the artillery was adequate, however the Italian crews were good and gave the British a fright in many cases.

Italian Armoured cars

Overview

The Italian built a number of excellent armoured cars, which proved very useful in the desert. The Italians quickly armred these vehicles with heavier and heavier weapons, providing significant punch. After the Italian surrender the Germans used a number of thes vehicles.

Aug42 152  SPA AS42/MG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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Italian Armoured cars

Medium Armoured Cars

Overview

The Italians designed a built a number of excellent medium armoured cars which were ideal for desert conditions.
After the Italian surrend many were used by the Germans.

Jan16 110  Lancia 12M	Dec41		
Jan35 46  AB 611/MG	Dec41		
Jan35 46  AB 611/ATR	Dec41		
Feb40 24  Autoblinda 40	Dec41		
Jan41 550  Autoblinda 41	Sep43		
Aug42 70  Autoblinda 42	Sep43		
Oct42 12  AB 42/47			Sep43
Feb42 120  AB 43	Sep43		
Apr43 1  AB 43/47			Sep 43

Italian Tankette

Overview

The italians put a lot of focus into tankettes, as did a number of other nations suchy as Poland and Japan. However the tankette provides less than useful and may were lost during the british desert offensive.

Jan33 300  L3/33	Dec41
Jan34 2500  L3/35	Aug43
Jan38 100  L3/38	Dec41
Jan39 12  L3/38/20	Dec41

Italian Italian Light Tank

Overview

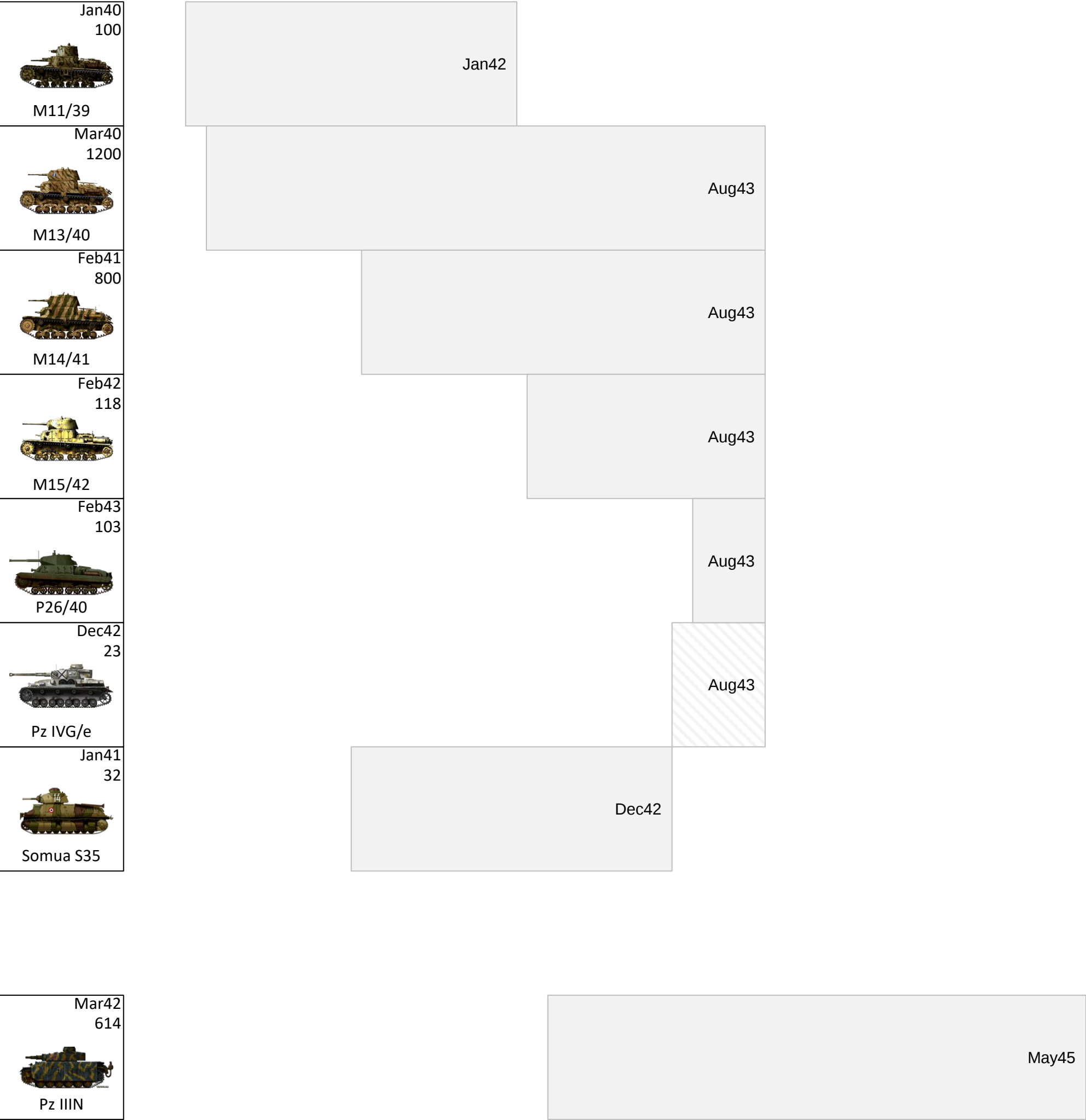
The Italians did not possess large number of light tanks, the tankettes were suppose to meet the needs of this type of vehicle. But aftere the failure of the tankettes the italians did develop a light tank, which serviced in smal numbers till the end of the war.

Jan34 100  L5/21	Feb42	
Jan36 52  L5/30	Feb42	
Jan42 283  L6/40		Aug43
Jan41 124  R-35 LT	Dec41	

Italian Italian Medium Tank

Overview

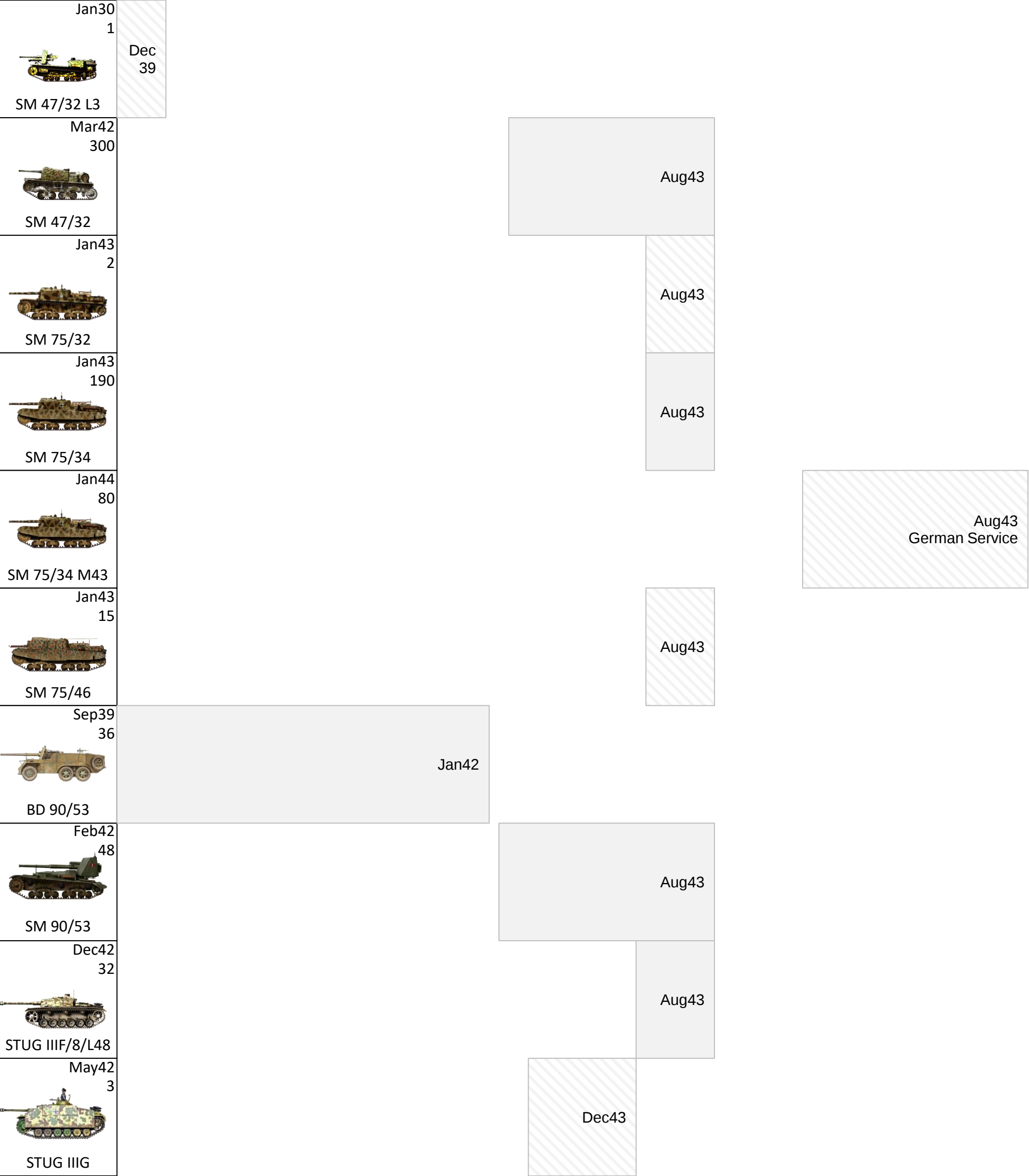
The Italian medium tanks were acceptable in 1940, but by the end of 1941 were obsolete. The Italians attempted to up armour their basic tank chassis, but in the end were required to replace tanks with their tank destroyers for any form of hitting power in their armoured divisions.



Italian Tank Destroyers

Overview

The Italians did produce some good tank destroyers, especially the excellent SM 75/34. The Italians had an urgent need to field a AFV which could stand up to the british and as ss Tank destroyers were easier to design and build, itw as the obviouls solution. Many were used by the germans after the Italian surrender.



Italian Self propelled Assault Guns

Close Support

Overview

The Italians build an excellent assault gun, or clsoe support armoured vehicle. Upgraded during the war it was used by the germans after the Italian surrender.

Jan41 36  SPA TL37 75/27
Feb41 60  SM 75/18 M40
May41 162  SM 75/18 M41
Jan43 243  SM 75/18 M42
Feb43 90  SM 105/25 M42
Jan44 90  SM 105/25

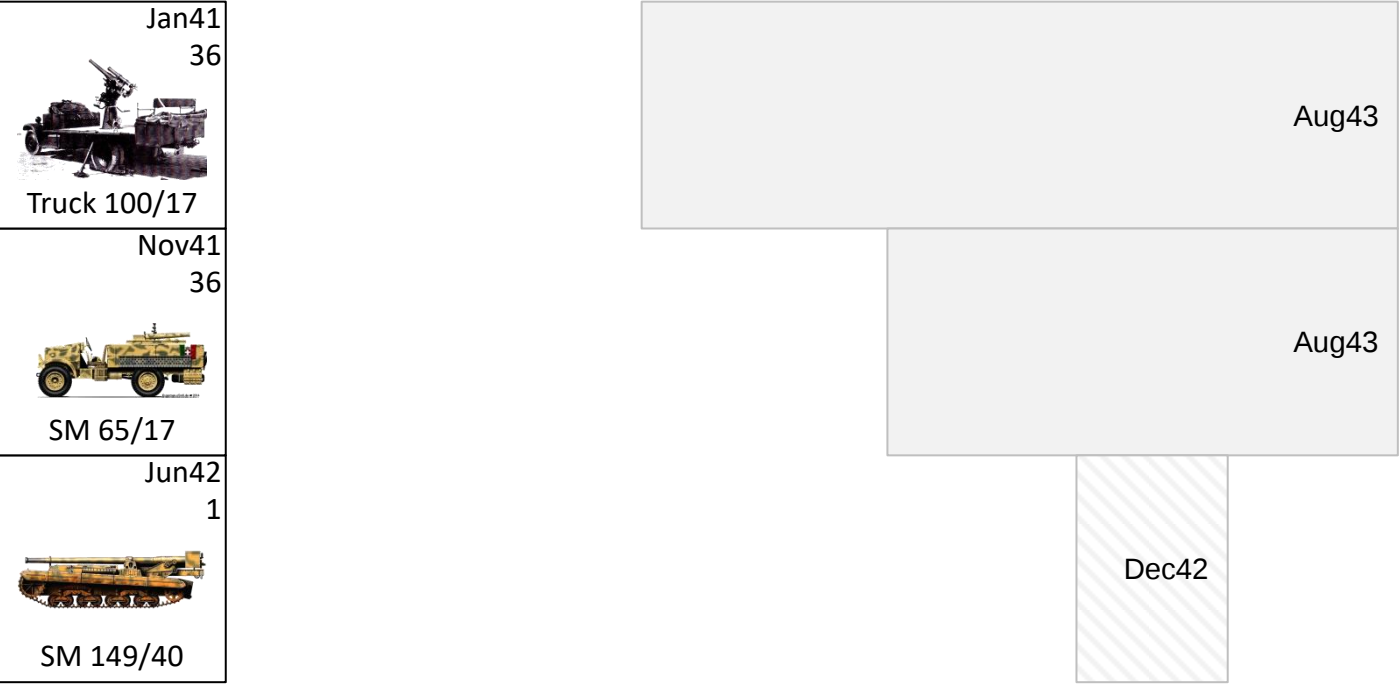
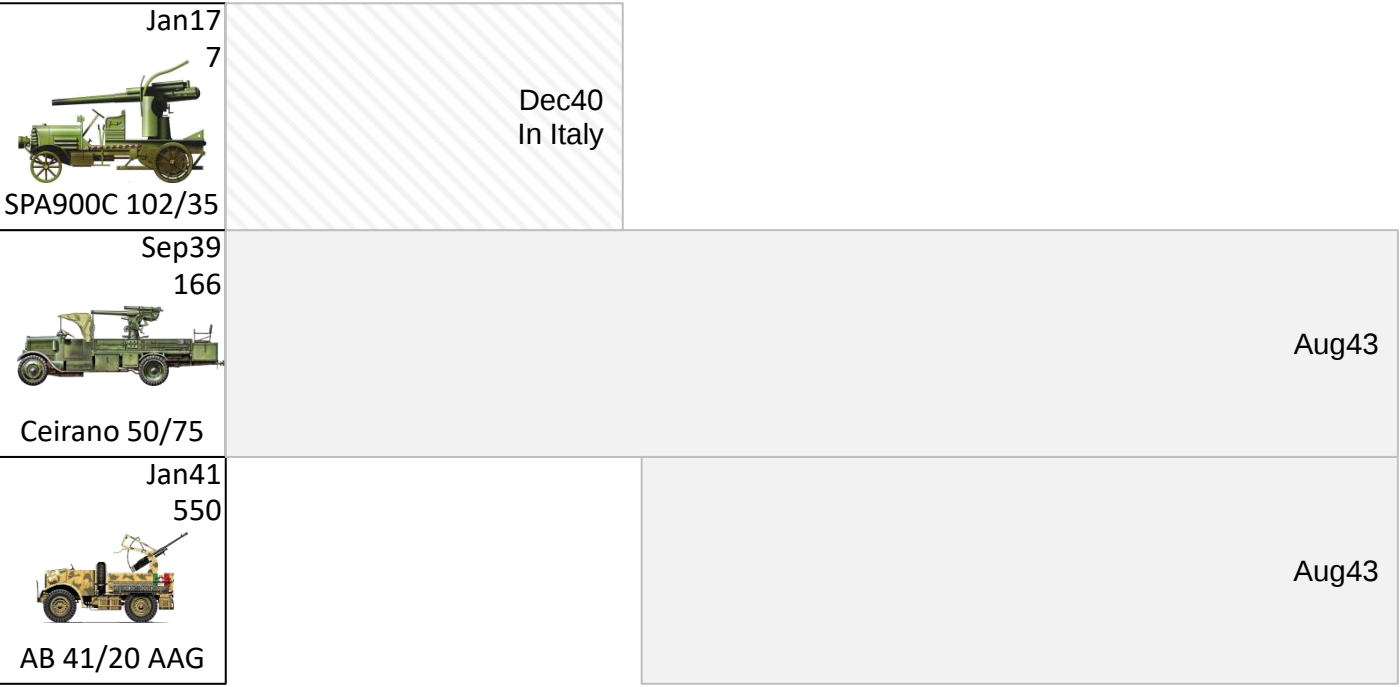


Aug43
German Service

Italian Artillery – Self propelled Anti-Aircraft & Howitzers

Overview

The italians realised their anti-aircraft needed to be modorised in the desert and mounted a 20mm cannon on a AB41, but other than this they did not focus a great deal on self propelled anti-aircraft guns or howitzers.



Italian Artillery

Anti-Tank Guns

Overview

The Italians did not possess good anty-tabnk guns, at the beginning of the war they used the 20/65 in an anti-tank role and the old, but effective, 47/32. They manufactuired the germands 3.7cm a/t gun, but this was obsolete by the end of 1942. They ended up relyingon the 47mm and german 8.8 cm a/t guns.

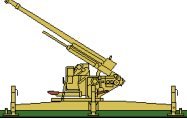
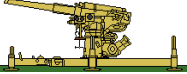
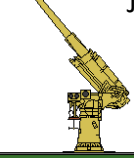
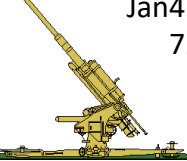
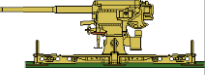
Jan35 900  20mm 20/65	Aug43
Jan39 1200  37mm 37/45	Aug43
Jan30 300  47mm 47/32	Aug43

Italian Artillery

Anti-Aircraft Guns

Overview

The italians had a good range of effective anti-aircraft weapons, only a lack of numbers hampered the Italians.

Jan35 2000  20mm 20/65		Aug43
Jan35 500  20mm 20/77		Aug43
Jan32 141  37mm 37/54		Aug43
 75mm 75/50		
Jan34 92  75/46mm m34	Dec40	
Jan40 32  75/46mm m40		Aug43
Jan41 72  88mm 88/55		Aug43 German 8.8cm
Jan41 72  8.8 cm Flak 18		Aug43
Jan41 72  8.8 cm Flak 36		Aug43
Jan41 72  8.8 cm Flak 37		Aug43
Jan39 539  90mm 90/53		Aug43

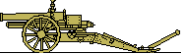
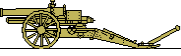
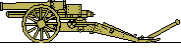
Italian Artillery

Guns & Infantry Guns

Overview

The Italians did not have many modern Artillery Guns (or cannons), although they has two good designed. The 105mm and 149mm M40 were good, but not available in large numbers. Infantry/Mountain guns were all wwi vintage.

Jan37 268  75mm 75/32		Aug43
Jan35 168  105/28 M35		Aug43
Jan01 895  149mm 149/35		Aug43
Jan40 51  149mm 149/40		Aug43

Jan07 2000  65mm 65/17/07		Aug43
Jan13 1500  65mm 65/17/13		Aug43
Jan15 480  70mm 10/15		Aug43

Italian Artillery

Howitzers

Overview

The Italians had a massive range of howixzters, many from wwii. Several attempts top upgrade the howitzers were made, but most pieces used were of wwii vintage.

 Jan06 1005 75/27mm M06	Aug43
 Jan11 1000 75/27mm M11	Aug43
 Jan12 300 75/27mm M12	Aug43
 Jan34 120 75/18mm M34	Aug43
 Jan35 120 75/18mm M35	Aug43

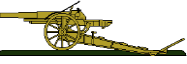
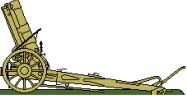
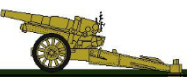
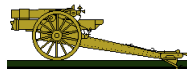
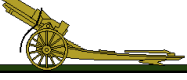
 Jan14 600 100/17mm M14	Aug43
 Jan16 600 100/17mm M16	Aug43
 Jan19 48 100mm 100/24	Aug43

Italian Artillery

Howitzers

Overview

The Italians had a massive range of howixzters, many from wwii. Several attempts top upgrade the howitzers were made, but most pieces used were of wwii vintage.

Jan12 854  105/28mm M12	Aug43	
Jan18 48  105mm 105/11	Aug43	
Jan18 120  105/14mm M18	Aug43	
Jan42 120  105mm 104/14		Aug43
Jan12 1397  149/12mm M14	Aug43	
Jan32 490  149/13 M32	Aug43	
Jan39 230  149/19 M37	Aug43	
Jan15 240  152mm 152/13	Aug43	
Jan16 44  152mm 152/37	Aug43	
Jan17 104  155mm 155/14	Aug43	
Jan35 20  210mm 210/22	Aug43	

Italian Artillery & Armoured personel Carriers

Mortars

Overview

The italisen employed an effective, if complex and expensive, light mortar. The medium mortar was adequate and both were used to the itlaina surrender. The Italians did not develop an APC until 1942, when they create a light and heavy troop transport wheeled APC. They also received some German SdKfz 251's.

Jan35 7000  45mm 45/5 m35	Aug43
Jan35 2177  81mm m35	Aug43

Jan42 150  Autoprotetto S37	Aug43
Jan42 110  Fiat 665NM	Aug43
Jan42 90  SdKfz 251	Aug43

JAPAN VEHICLES & ARTILLERY

GENERAL

The Japanese army was primarily an infantry force. While a reasonable focus was given to development of armoured fighting vehicles, at the beginning of WWII the Japanese tanks were too light and had a gun which was too small to be effective. When the Japanese army met the Russians in Mongolia this gap was evident. The Japanese attempted to fill the gap and they did develop a reasonable medium tank by 1944, but its lack of industrial capacity meant it was never going to have a large armoured force. The situation concerning artillery was also an issue, but not as severe.

TANKS

Japanese tanks in 1941 were obsolete by contemporary standards. However in the jungles of Asia the light tanks which were employed were unopposed and did have a significant effect. When they met modern allied armour this advantage all but evaporated. The Japanese did put effort in developing a modern medium tank and they succeeded, but the numbers of these vehicles was low and when the Russian struck in 1945, the tanks were overwhelmed.

TANK DESTROYERS

The Japanese, like the Italians, discovered that the quick way to gain entry in the world of tanks was by developing tank destroyers. The Japanese did develop a wide range of tank destroyers and many were effective, but their numbers were low.

ARTILLERY

The Japanese had a full range of artillery which served it well. By western standards the artillery pieces were unusually light, but this assisted the Japanese in getting artillery into difficult terrain. The light nature of the artillery resulted in range issues.

The situation with anti-aircraft guns was not as good, the Japanese had a good range of light anti-aircraft guns, but lacked sufficient numbers of medium anti-aircraft guns. Medium anti-aircraft guns are very heavy, which makes them difficult to transport.

The situation with anti-tank guns was the most serious. The Japanese lacked an effective anti-tank gun right up to the end of the war.

Japanese Armoured Cars
Tankette

Overview



Type 87 Dowa



Type 92 Chiyoda



Type 92 Osaka



Type 93 Kokusan



Type 93 Sumida



Type 95 So-Ki

Japanese Light Tank

Pre-War

Overview

Jan36 167  Type 92 Jyu-Sokosha/e
Jan38 167  Type 92 Jyu-Sokosha/l
Jan35 823  Type 94 Te-Ke/e
Jan37 823  Type 94 Te-Ke/l
Jan39 2300  Type 95 Ha-Go/e
Jan41 2300  Type 95 Ha-Go/l
Jan37 596  Type 97 Te-Ke/37
Jan37 616  Type 97 Te-Ke/MG

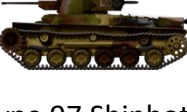
Japanese Light Tanks

During the war

Overview

Jan41 104  Type 98 Ke-Ni/41
Jan42 104  Type 98 Ke-Ni/42
Jan42 104  Type 98B Ke-Ni
Feb42 184  Type 2 Ka-Mi
Feb44 29  Type 2 Ke-To
Jan44 100  Type 4 Ke-Nu

Japanese medium Tanks

Jan35 409  Type 89 I-Go
 Type 89A I-Go
 Type 89B I-Go
Jan38 1163  Type 97 Chi-Ha/e
Jan42  Type 97 Chi-Ha/I
Feb42 930  Type 97 Shinhoto
Jan41 170  Type 1 Chi-He
Feb42 30  Type 2 Ho-I
Nov43 166  Type 3 Chi-Nu
Feb44 2  Type 4 Chi-To
Mar42 19  Type 3 Ka-Chi

Japanese Close Support Tanks & Assault Guns
Japanese Artillery – Self propelled Howitzer

Feb42
30



Type 2 Ho-I

Jan41
30



Type 97 Chi-Ha/120

Feb43
10



Type 1 Ho-Ni III

Feb44
25



Type 4 Ho-Ro

Mar35
4



Type 95 Jiro-Sha

Jan44



Type 4 Shisei

Japanese Tank Destroyers

Feb43 124  Type 1 Ho-Ni I
Feb43 54  Type 1 Ho-Ni II
Mar43 31  Type 3 Ho-Ni III
 Type 4 Na-To
 Type 5 Ho-Ru

Japanese Self propelled Anti-Aircraft

Jan39

Type97 Sa-To (1)
Jan39

Type97 Sa-To (2)
Jan44

Type 2 So-Ki
Mar43

Type 98 Ho-Ki
Mar42

Type 97 Ki-To

RUSSIAN VEHICLES & ARTILLERY

Overview

IN 1939 the Russians possessed an enormous inventory of adequate armoured vehicles and artillery, however by 1941 many of the tanks were close to being obsolete. However, many of these obsolete tanks were superior to the German PzKfz I and II, so should have been more than adequate in meeting the German onslaught. The issue with the Russians was lack of maintenance and spare parts. The various 5 years plans created a major focus on producing of vehicles and guns, but minimal on providing them with spare parts. To meet the various centrally imposed quotas spare parts were given a very low priority. The second issue was lack of maintenance, there was a lack of skilled soldier who could perform this and the purges removed any officers who could of attempted to resolve this. As a result many of the tanks were not serviceable and capable of meeting the Germans.

Tanks

The early tanks were close to being obsolete, but it was a lack of maintenance which caused them to be ineffective at the beginning of the war. However the ace the Russians had was a range of leading edge tanks, the KV-1 and T-34, both of which outclassed any tank in existence at the time. In 1941 the KV-1 caused panic among the German troops, although by mid 1942 they had learned how to deal with this metal monster. The T-34 required numbers and it was not until mid 1942 than sufficient T-34's were available to give the Germans serious problems. To fill out numbers the less effective T-60 and T-80 was still being produced. At Kursk the Russians were shocked at the employment of the German Tiger and Panther, so an urgent program was initiated to continue to upgrade the KV-1, which was going to be phased out, and the T-34. It was not until 1944 than the new vehicles were available and while not the equal of the German tanks, they were adequate.

Tank destroyers

The Russians were impressed with the StuGIII, and employed them when captures. They also created their own versions of this assault gun & tank destroyer, creating the excellent SU-7, SU-85 & SU-100 tank destroyers and the SU-122 and SU-152 assault guns.

Artillery

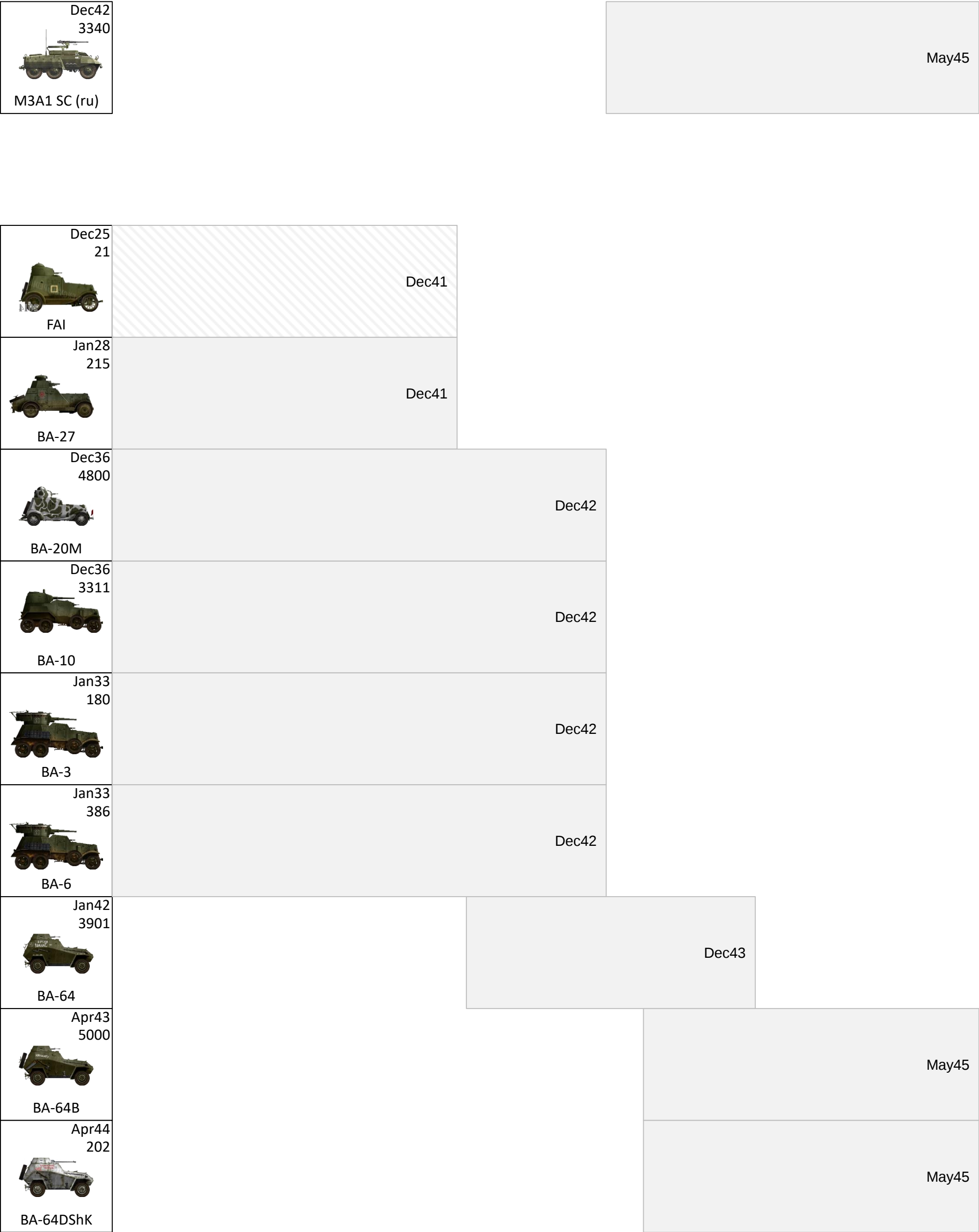
The Russians had a lot of artillery and some of it was very good. The 76.2mm gun, while an average field gun, provided highly effective in direct fire and a/t roles. The 122mm gun had excellent range, which outranged the German 15cm Howitzer and the 152mm provided significant weight of shells. However the major issue with artillery was a lack for skilled men to perform modern indirect fire. As a result the Russians were always in a significant disadvantage when facing German artillery in a mobile situation.

Because the Russians lacked a man portable Rocket propelled anti-tank weapons, they depended on anti-tank guns and anti-tank rifles to deal with tanks. The result was they possessed a lot of these two weapon classes. While inefficient compared with the western allies used of Bazooka's and PIAT's, lack of skills in the infantry forced them to do this. They tried out the bazooka but never adopted it, possibly because it proved to be complex to use effectively.

Russian Scout Cars & Armoured cars

Overview

The Russians possessed a large number of obsolete and heavily armed armoured cars in 1941, but by 1942 they had determined only one type was necessary for reconnaissance purposes. They also used the US M3 SC in this role.



Russian Tankettes

Overview

The Russians, like many other countries, experimented with tankettes, but quickly determined they were of minimal value. The T-27 was available dir the war but by the end of 1941 were all destroyed, or converted to other purposes.

Jan-27 1000  T-27A	Dec41
Jan-29 1540  T-27B	Dec41

Russian Light Tanks

T-26

Overview

When designed in 1935 the T-26 was a good tank, however by 1941 it was showing its age. Coupled with poor servicability most were destroyed or captured in the first 6 months of the war.

Jan35 100  T-26 M31 A1	Dec41
Apr35 1361  T-26 M31 A2	Dec41
Aug35 576  T-26 M31 A3	Dec41
Jan36 450  T-26 M32 B1	Dec41
Jun36 10  T-26S M32 B1	Dec41
Jan37 4192  T-26 M33 B2	Dec42
Jan38 1887  T-26S M38	Dec41
Jan40 887  T-26S M38	Dec41
Jan39 1975  T-26 M39	Dec41

Russian Light Tanks

T-37, T-38, T-40 & T-50

Overview

The Russians possessed a large number of light tanks, most were destroyed, captured or converted by the end of 1942

Jan37 10  T-37	Dec41	
Jan38 1200  T-37A	Dec41	
Jan37 300  T-38	Dec41	
Jan38 1000  T-38 m38	Dec41	
Jan41 110  T-40S T30A	Dec42	
Jan41 110  T-40S T30A/MG	Dec42	
Jan42 110  T-40S T30B	Dec42	
Jan42 110  T-40S T30B/MG	Dec42	
Feb41 69  T-50	Dec42	

Russian Light Tanks

T60, T-70 & T-80

Overview

The Russians continued to develop and product light tanks, primarily to keep tank numbers up. As the war progressed and this became less of a priority light tank production dropped.

Apr41 1292  T-60/20
Feb42 5000  T-60A/20
Jan42 2226  T-70
Mar42 6000  T-70A
Mar43 120  T-80/45



Russian Light Tanks
Fast Tanks, BT

Overview

The Russians developed a range of Fast tank which provide to be too lightly armed. They were religated to the role of light tanks and most were destroyed, captured or converted by the end of 1942.

Jan36 620  BT-2/BT-3/37	Dec41
Jan36 620  BT-2/BT-3/45	Dec41
Jan36 620  BT-2/BT-3/MG	Dec41
Jun36 3  BT-4	Dec41
Jan37 5000  BT-5	Dec42
Sep37 4955  BT-7	Dec42
Jan39 154  BT-7-2	Dec41
Jan39 154  BT-7-M	Dec41

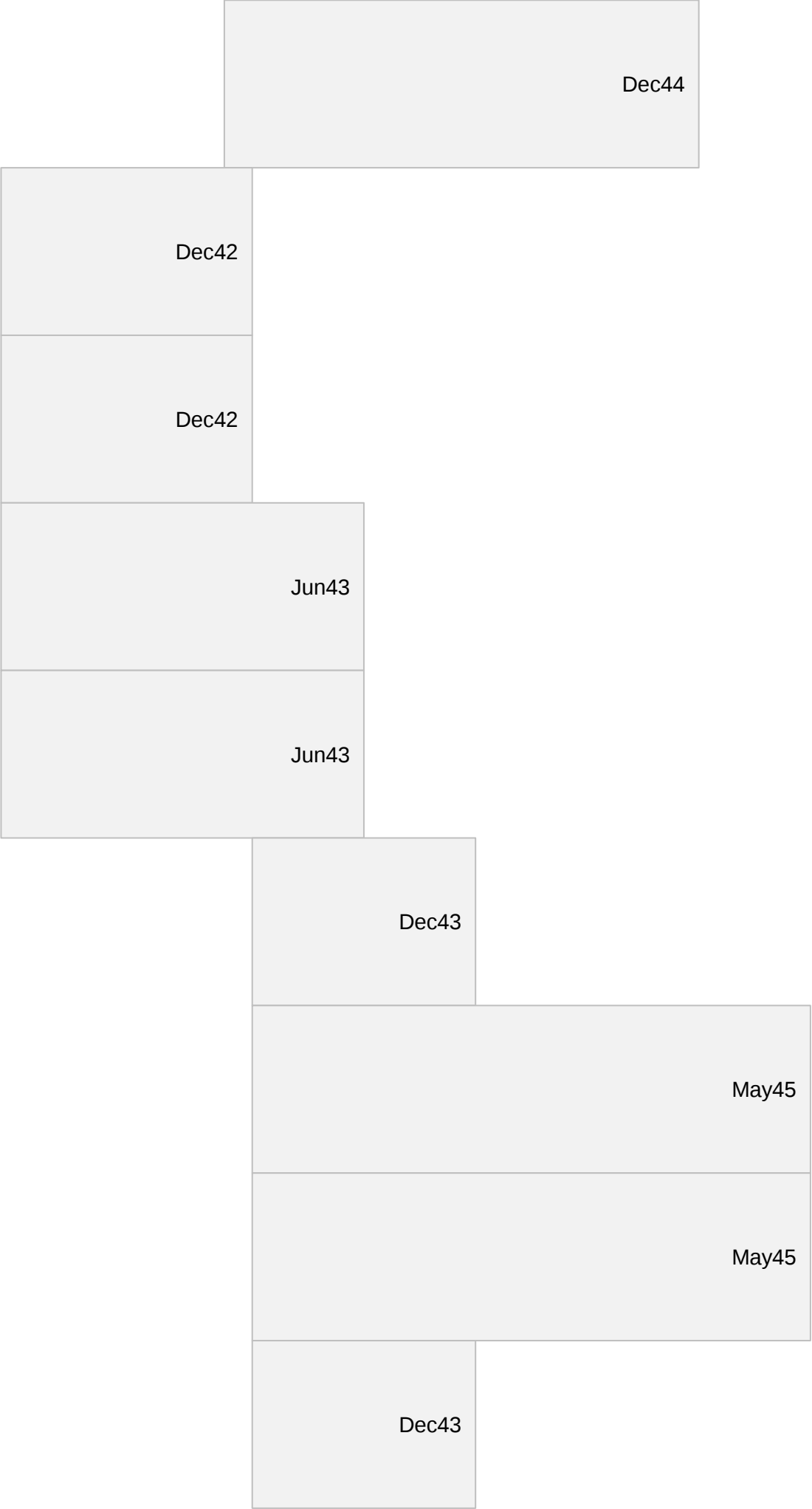
Russian Light Tanks

Lend Lease

Overview

The Russians received light tanks from the west and the valentine, which it classed as light. These took the place of the T-60/70/80 in the light tank formations. The main benefit of the wester tanks was their reliability.

Oct42 1676  M3A1/e LT
Oct41 407  Valentine I
Oct41 136  Valentine II
Dec41 346  Valentine III
Oct41 449  Valentine IV
Dec41 227  Valentine V
Dec42 1208  Valentine VIII
Dec42 818  Valentine IX
Dec42 66  Valentine X



Russian Medium Tanks

T-28 & T-32

Overview

The standard medium tank of the Russians at the beginning of the war was the T-28, a large but poorly armoured vehicle. Some attempts were made to upgrade it in 1940-41, but it was scheduled to be replaced by the T-34. Most were destroyed, captured or converted in the first year of the war.

Dec33 400  T-28A	Dec41	
Dec34 53  T-28B	Dec41	
May40 50  T-28C		Dec41
May41 50  T-28C/I		Dec41
May40 50  T-28E	Dec41	
May41 50  T-28E/I		Dec41
May40 50  T-28-85	Dec41	
Jan40 100  T-32	Dec41 Prototype	

Russian Medium Tanks

T-34

Overview

The Russians built one of the best medium tanks of the war, until the introduction of the Panther itw as the best medium tank of the war and represented a significant leap forward in tank design. At the end of the war the Russians developed the T-44, but it was not used in any numbers and was not considered very successful.

Mar41 400  T-34-76A
May41 9290  T-34-76B
Apr42 3111  T-34-76C
Dec42 3000  T-34/76D
Apr43 10760  T-34/76E
Dec44 3000  T-34/76F
Jan44 800  T-34/85 m43
Aug44 17680  T-34/85 m44
Jan45 13000  T-34/85 m45
Apr42 10  T-43
Jan45 1923  T-44



Russian Medium Tanks

Lend Lease

Overview

The Russians received a large number of medium tanks from the wester allies. The M3 was not particurly liked, but the M4 was liked and used in the mechanised corps due to its reliability.

Apr42 322  M3A3 MT/L31
Apr42 109  M3A3 MT/L41
Apr42 284  M3A5 MT/L31
Apr42 307  M3A5 MT/L41
Apr42 1500  M4A2(75) MT
Jan44 1000  M4A2(76) MT
Jan44 1000  M4A3(76) MT
Feb44 1095  M4A3E8(76) MT
Feb43 507  M4A4(75) MT

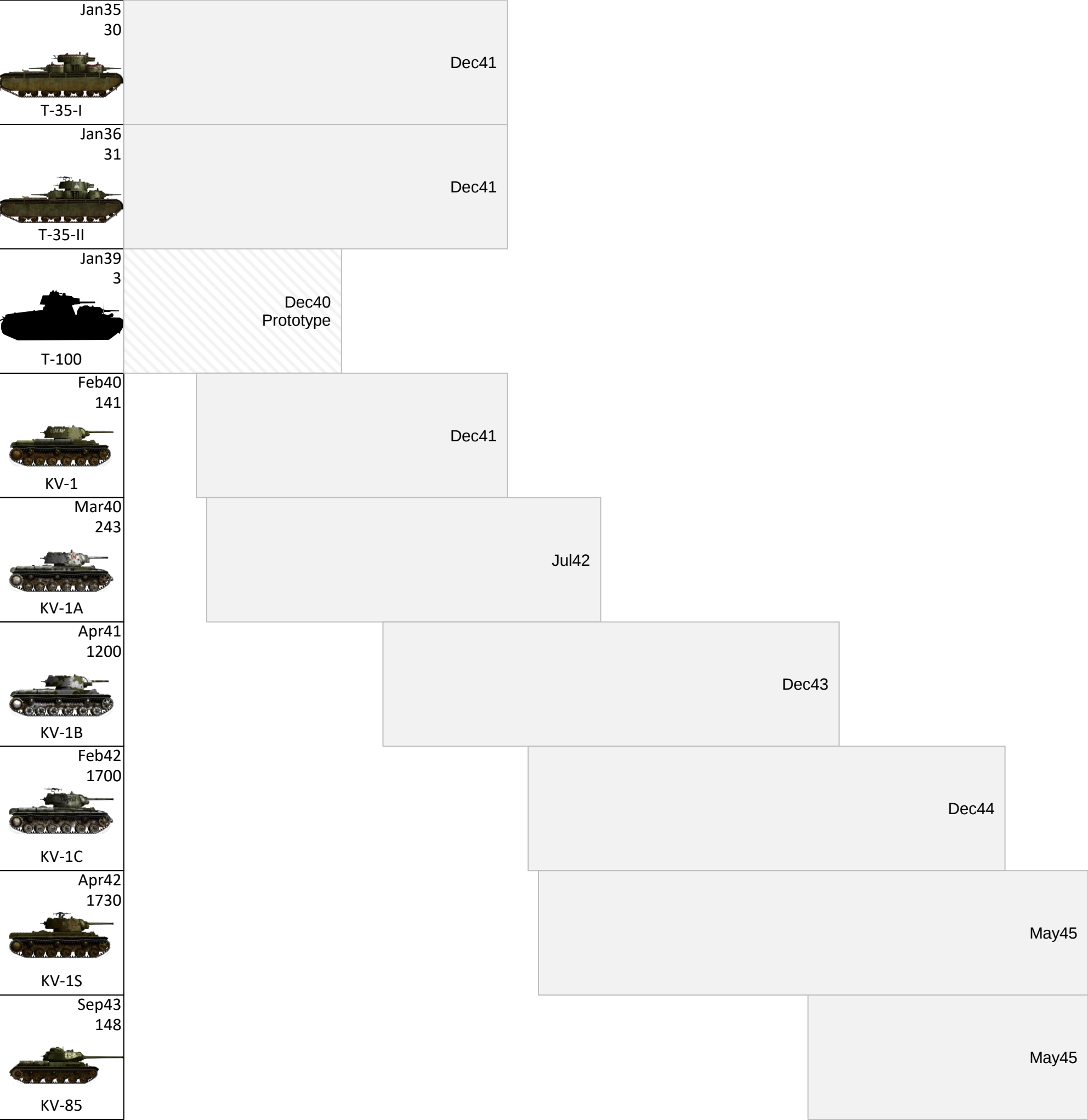


Russian Heavy Tanks

KV

Overview

The Russians entered the war with an obsolete heavy tank and a new modern heavy tank, the KV-1. The KV-1 caused the Germans great problems in 1941, but by 1942 was no longer effective. The Russians were going to stop production of heavy tanks until they met the German Tiger and they developed a range of new heavy tanks based on the KV-1. Until the KV-85 they were of mixed value.



Russian Heavy Tanks

IS & Lend Lease

Overview

The Russians did receive lend lease heavy tanks, however these were of limited value after mid-1943. The Russians last heavy tank was the IS series, which from the IS-II was an excellent tank. The gun was primarily designed to attack infantry in prepared positions, but was also effective in an anti-tank role – although rate of fire and accuracy was an issue in this case.

	Jan44 130
IS-I	
	Mar44 2000
IS-II	
	Sep44 1854
IS-II/utzm	
	Mar45 2311
IS-III	

			May45
			May45
			May45
			May 45

	Oct41 113
Matilda II	
	Dec41 694
Matilda IV	
	Feb42 26
Churchill Mk.II	
	Apr42 127
Churchill Mk.III	
	May42 105
Churchill Mk.IV	

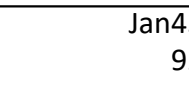
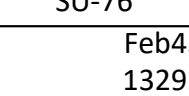
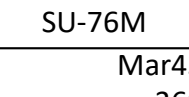
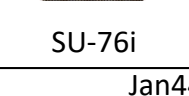
			Dec42
			Dec43
			Dec42
			Dec43
			Dec43

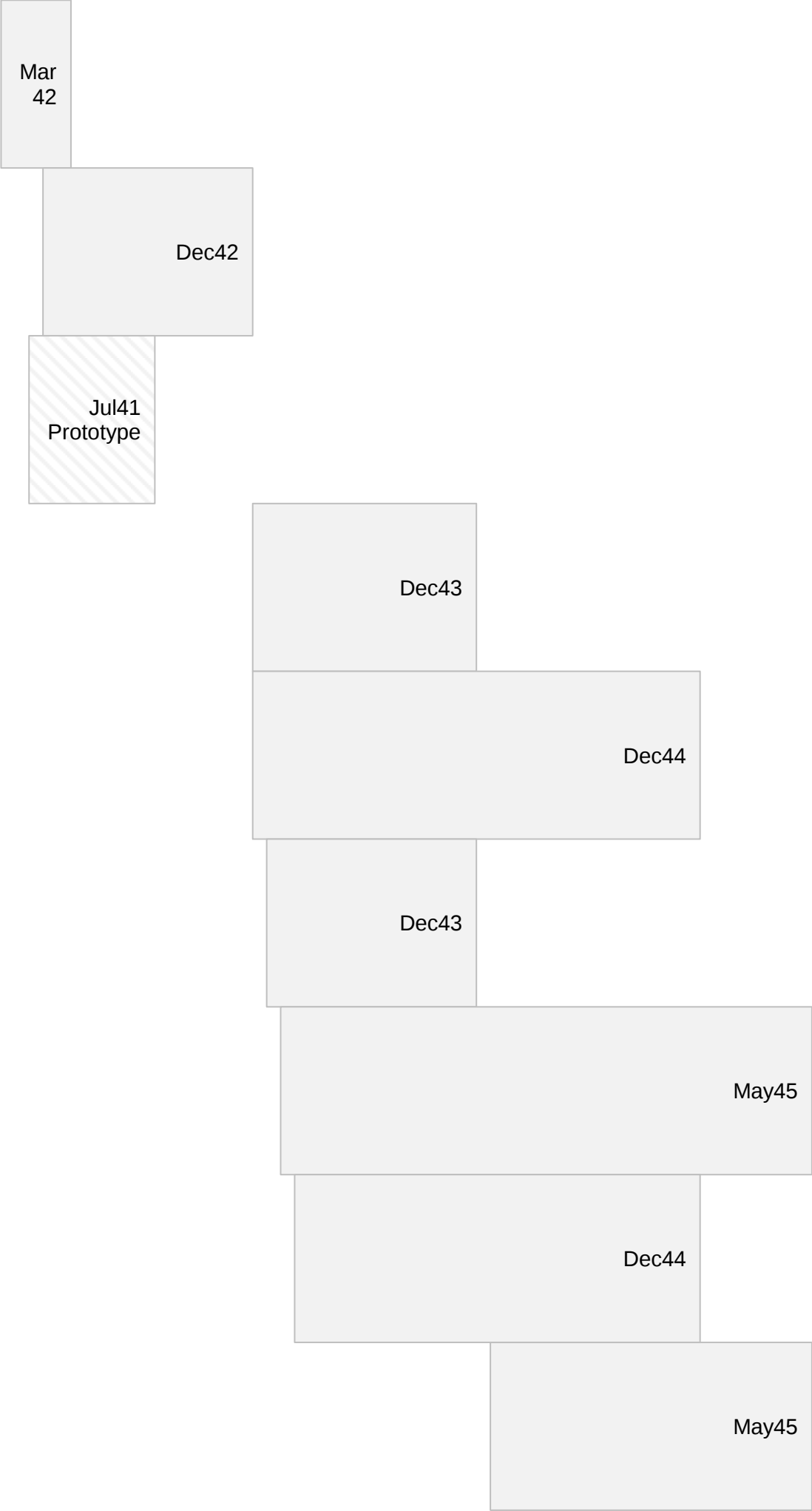
Russian Tank Destroyers

SU & Lend Lease

Overview

The first Russian tank destroyers were converted from older vehicles in 1941, their success was mixed. When the Russians met the StugIII tank destroyer they were impressed with the vehicle and designed their own, the SU-76.

 ZiS-30	Oct41 100
 SU-26	Jan42 100
 SU-45	Dec41 3
 SU-57-1	Dec42 50
 SU-57-2	Dec42 600
 SU-76	Jan43 92
 SU-76M	Feb43 13292
 SU-76i	Mar43 360
 SU-76B	Jan44 64



Overview

With the success of the SU-76 the Russians developed the SU-85 and SU-100, as well as using some american tank destroyers. The SU-85 was particualty successful as it could also be used to attack entrenched infantry.

Mar43 1550  SU-85
Sep44 500  SU-85M
Sep44 2335  SU-100
Jan43 52  M10 GMC/I



Assault Gun & Close Support Tank

Overview

The Russians developed a range of close support tanks, which were all destroyed or captured in the first year of the war. It was not until the end of 1943 that they would deploy assault guns, which would serve the same purpose. Attacking entrenched infantry. In that these vehicles were very successful, although in an anti-tank role, which they expected to fulfill as well, they were less than successful.

Jan39 183  AT-26	Dec41
Jan40 334  KV-II	Dec41
Jan37 100  BT-5A	Dec41
Sep39 583  BT-7A	Dec41
Jan43 1150  SU-122	
Apr44 1735  iSU-122	
May44 675  iSU-122S	
Feb43 670  SU-152	
Jan44 4635  iSU-152	

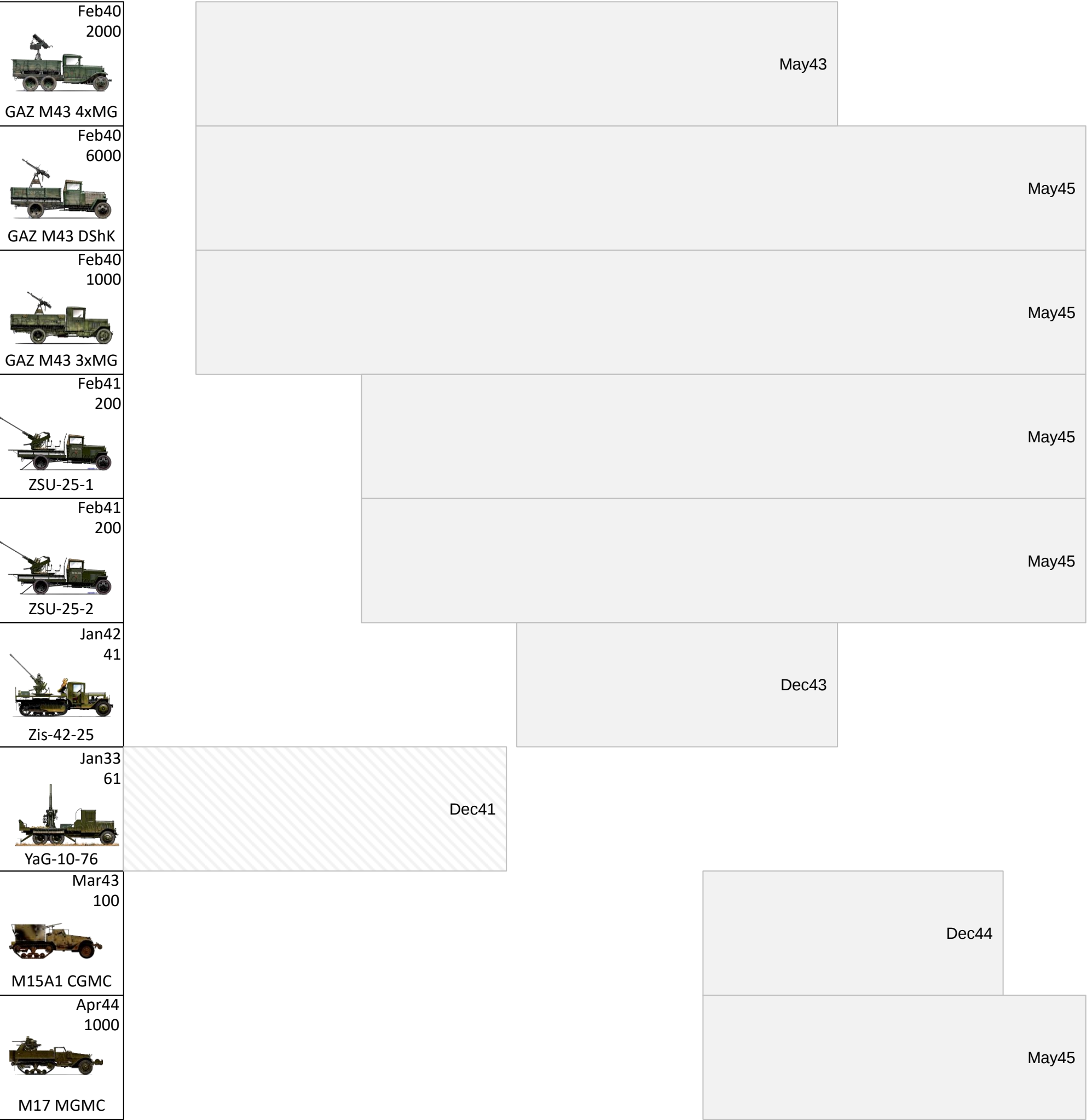


Self Propelled Artillery

Anti-Tank Guns (Wheeled & Half Tracked)

Overview

The Russians developed a range of anti-aircraft machine guns mounted on trucks before the war, these were useful but too light so heavier a.a guns were mounted on trucks and half-tracks. When the Russians received US armoured sp aa weapons, they were impressed and started developing btheir own armoured sp aa weapons.



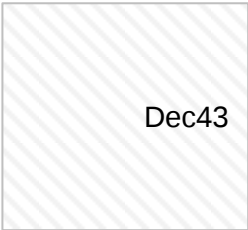
Self Propelled Artillery

Anti-Tank Guns (Tracked)

Overview

The Russians discovered unarmoured SP aa vehicles were vulnerable to strafing and the lack of protection meant the crews were less likely to man the weapon when under strafing attacks. The developed their own armoured sp aa weapons based on the light tanks. Their numbers were never great and the Russians relied on trucked mounted AAMG till the end of the war.

Mar43 10  T-90
Mar45 75  ZSU-37
Mar45 75  ZSU-37-1
Mar45 40  ZSU-37-2



May 45
May 45
May 45

Self propelled Artillery Rockets

Overview

The Russians developed excellent rocket artillery which was just available in time for the war. The artillery was classed by rocket diameter and numbers of tubes with the most useful being the BM-13-16. With the arrival of american trucks they were quickly mounted on these vehicles due to their excellent cross country abilities and reliability.

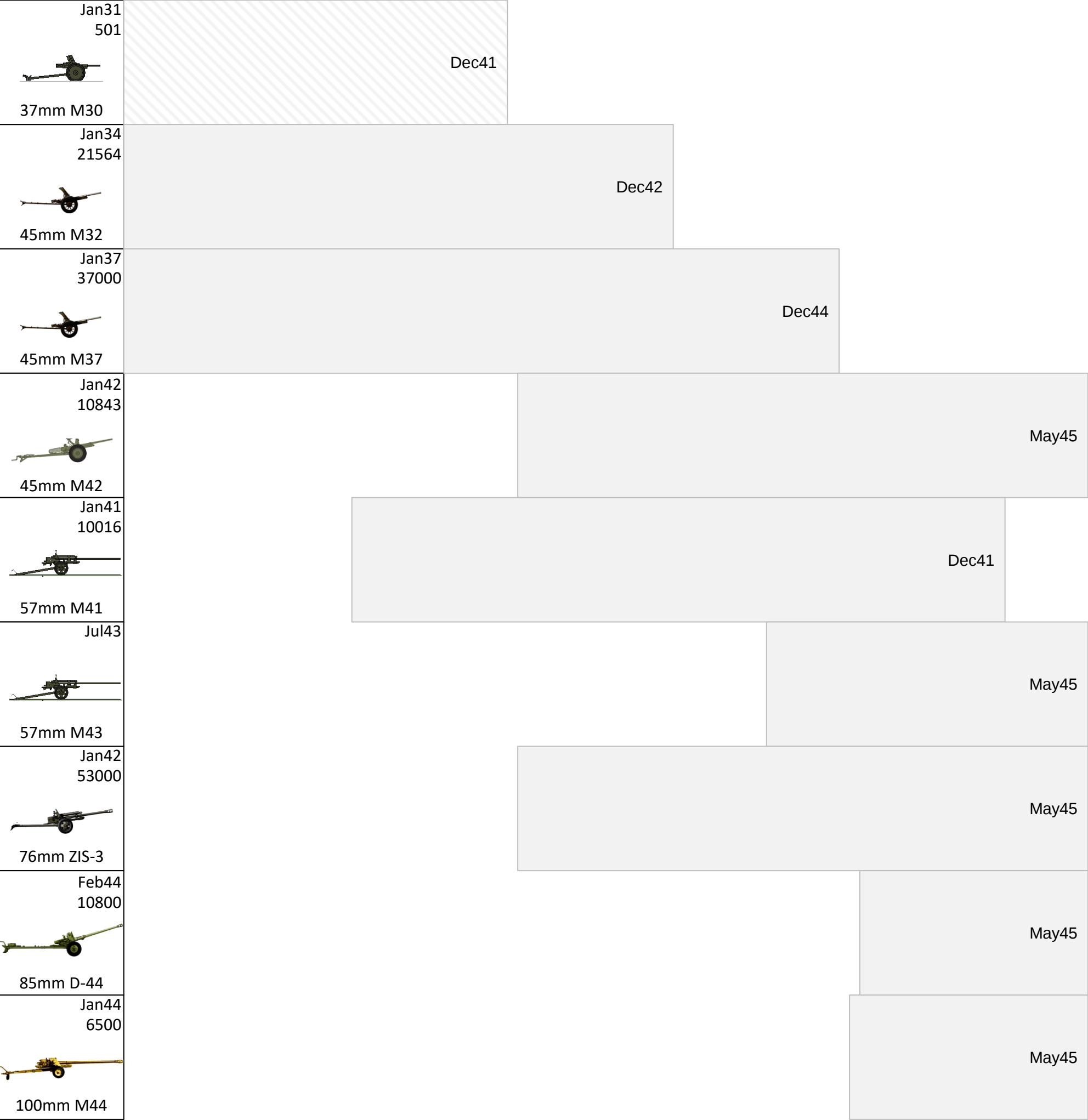
 Dec41 100 BM-8-8	Dec43
 Aug41 44 BM-8-24	Dec42
 Aug41 1000 BM-8-36	May45
 Aug41 1000 BM-8-48	May45
 Jan43 1800 BM-13-8DD	May45
 Jan40 2000 BM-13-16	May45
 Jan43 800 BM-13-16DD	May45
 Jul41 1800 BM-13S-16	May45
 Jan42 2300 BM-31-12	May45

Artillery

Anti-Tank Guns

Overview

The Russians lavishly equiped their troops with anti-tank guns, but as most of the combatents had to constanly upgrade them as enemy armour increased. The only time they fell behind was when the germans introduced the Toger and Panther tank, in this case they used their 85mm AA guns in the role of a/t guns until the suitable a/t guns were available. They did retain most of their guns until the end of the war.

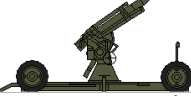
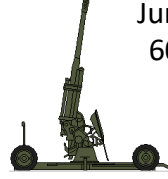


Artillery

Anti-Aircraft Guns

Overview

The Russians started the war with a number of excellent anti-aircraft guns and apart from an upgrade to the 85mm, no major development occurred here. The only issue was a lack of a mluti-barrel cannon for close range targets, however after mid 1944 this was not as impoartnt.

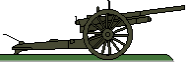
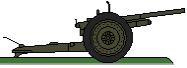
Feb40 46860  25mm M40				May45
Jan34 20000  37mm M39	May45			
Jan31 600  76mm M31 Flak	Dec41			
Jan38 600  76mm M38 Flak	Dec41			
Jan39 6000  85mm M39 Flak	May45			
Jun44 6000  85mm M44 Flak				May45

Artillery

Infantry Guns (aka regimental guns)

Overview

The Russians deployed a regimental gun, or infantry gun, which was used up to the end of the war. Some older divisionsal guns were used in this role during the first 12 months of the war, but they were mostly destroyed or captured by mid 1942.

Jan30 2066  76mm M02/30	Dec41
Jan32 2411  76mm M02/30m	Dec41

Jan27 16482  76mm M27	Dec43
Jan43 5122  76mm M43	May45

Artillery

Divisional Guns 76/107

Overview

The Russians produced a large number of 76mm Divisional guns, while very lite for an indirect fire weapon, it was excellent as a direct fire weapon, especially against enemy tanks. Due to lack of specilaist this was all that the division could achieve. The 107mm division gun was not considered effective and not produced in large numbers.

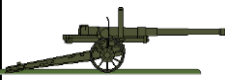
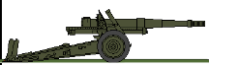


Artillery

Divisional Guns 122/152

Overview

The Russians produced a large number of medium guns, such as the 12mm and 152mm. These weapons had excellent range and caused the Germans a great deal of problems due to counter-battery fire. The 203mm Howitzer was a particulaty effective weapon, although its lack of mobility was an issue.

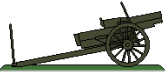
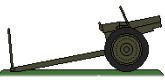
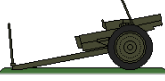
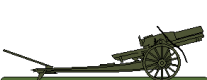
Jan36 2450  122mm M31	Dec41
Jan37 2450  122mm M31/37	Dec45
Jan39 1225  122mm M37	May45
Jan30 152  152mm M30	Jul42
Jan34 275  152mm M34	Jul43
Jan37 1000  152mm M37	Jul42
Jan39 6884  152mm M37m	May45
Jan37 37  152mm M35	May45
Jan31 871  203mm M31	May45

Artillery

Divisional Howitzers

Overview

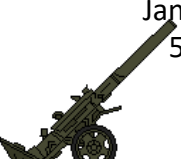
The Russians started the war with a large inventory of 122/152 howitzers. Many were lost in the first 12 months of the war resulting in a smaller number of modern types. These hgowizters were adeuqate, if not superior to the Germans.

Jan27 900  122mm M09/27	Dec41	
Jan37 900  122mm M37	Dec42	
Jan30 5900  122mm M10/30	Dec41	
Jan39 5900  122mm M30	Dec43	
Jan38 19266  122mm M38	May45	
Jan30 2611  152mm M09/30	Dec41	
Jan37 2611  152mm M30	Dec43	
Jan37 99  152mm M10/37	Dec41	
Jan39 99  152mm M37	Dec42	
Jan38 1522  152mm M38	May45	
Jan43 2827  152mm M43	May45	

Artillery Mortars

Overview

The Russians were the first to product very large mortars, 120mm and 160mm. The germans were so impressed they developed their own 120mm mortar. The other mortars were adeuqlate and plentiful. As mortars were simple to use and there was a alck of indirect artillery, these provided very important.

Jan38 12000  50mm M38	Jul42	
Jan40 12250  50mm M40	Jul43	
Jan41 21000  50mm M41		May45
Jan36 160000  82mm M37	May45	
Jan38 12000  107mm M38	May45 Mountain	
Jan38 12000  120mm M38	Dec44	
Jan43 24000  120mm M43	May45	
Jan43 535  160mm M43	May45	

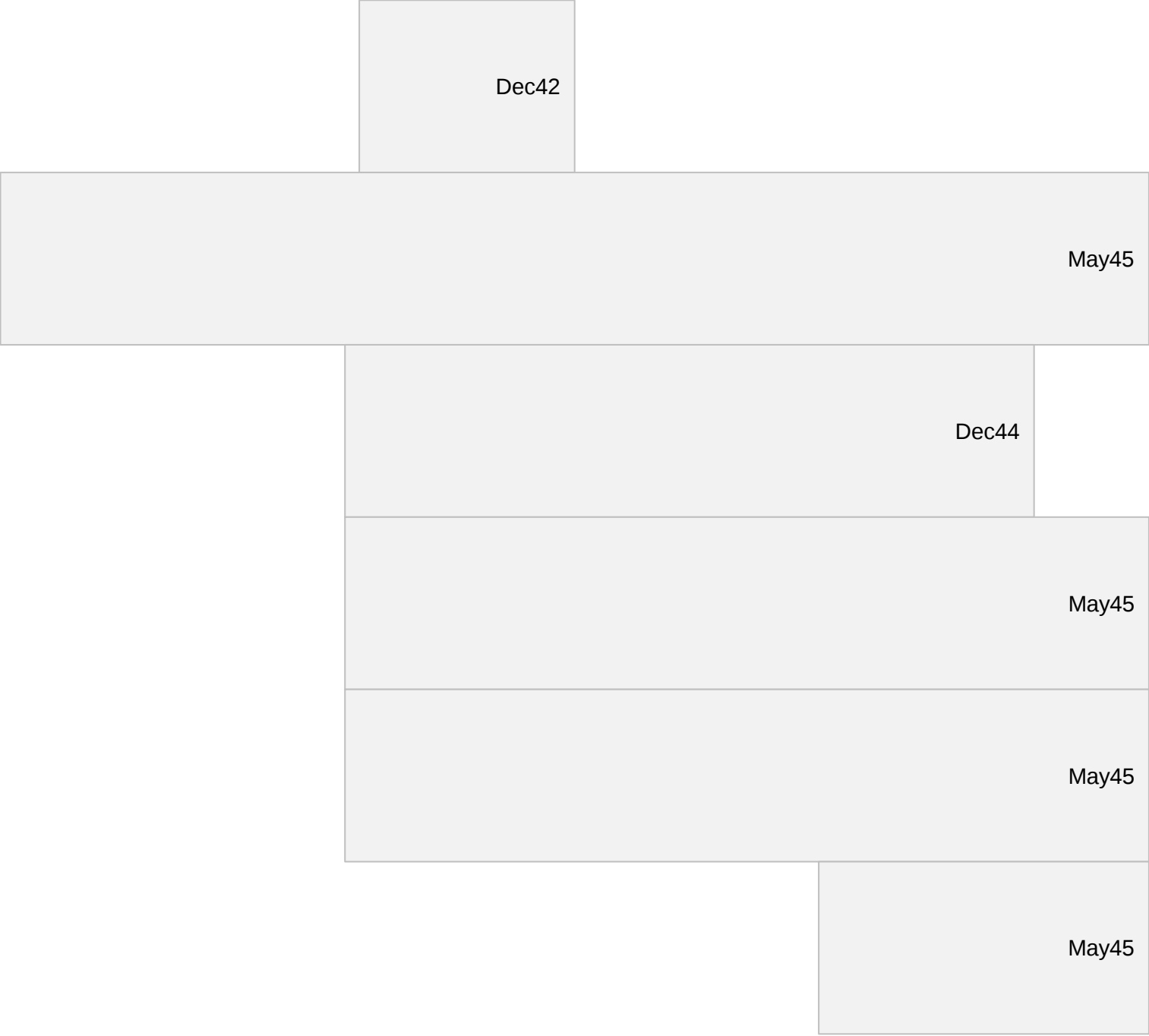
Armoured Personal Carriers

Wheeled and Half Tracks

Overview

The only APC the russians produced was an armoured ZiS truck. This lacked mobility, but did offer some protection against artillery and small arms fire. The russians did convert some armoured cars into APC's on an ad-hoc basis, with limited success. The American HT was the preferred APC and these were used in reconnaissance companies in the tank and mech corps.

Jan42 200  BA-10 APC
Jul40 1000  ZIS APC
Dec41 342  M2 HTP (ru)
Dec41 421  M9 HTP (ru)
Dec41 421  M5 HTP (ru)
Jan44 96  T16 Carrier (ru)



CAMPAIGNS OF WORLD WAR II

Overview

The following slides provide a year by year view of the major campaigns of the war in europe. No hypothetical conflicts are includes, such as a FRANCE 1939 campaign. Players can create these as they see fit.

This is designed to be used with both the Equipment Availability and Table of Organisation and Equipment to allow readers to determine the typical equipment available and organisation used during each campaign. This can be used in conjunction with micro-armour rules to ensure any conflict is a realistic as possible.

1939

Optional Conflicts

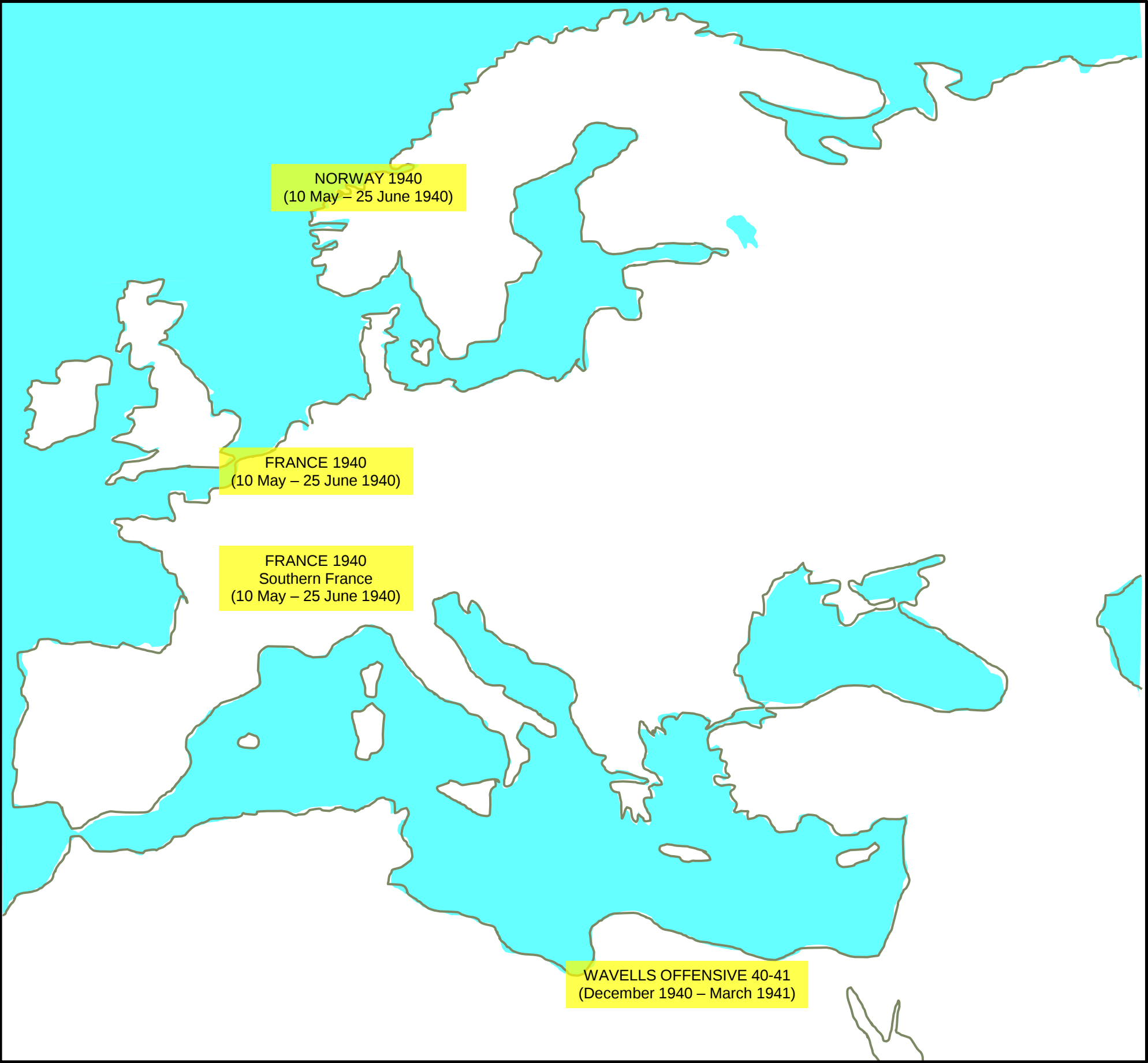
West Front 1939 : France attacks Germany in the west front. East Front 1939 : Russian comes to the aid of Poland.
Russian invasion of Poland: Russian invaded Poland.



1940

Optional Conflicts

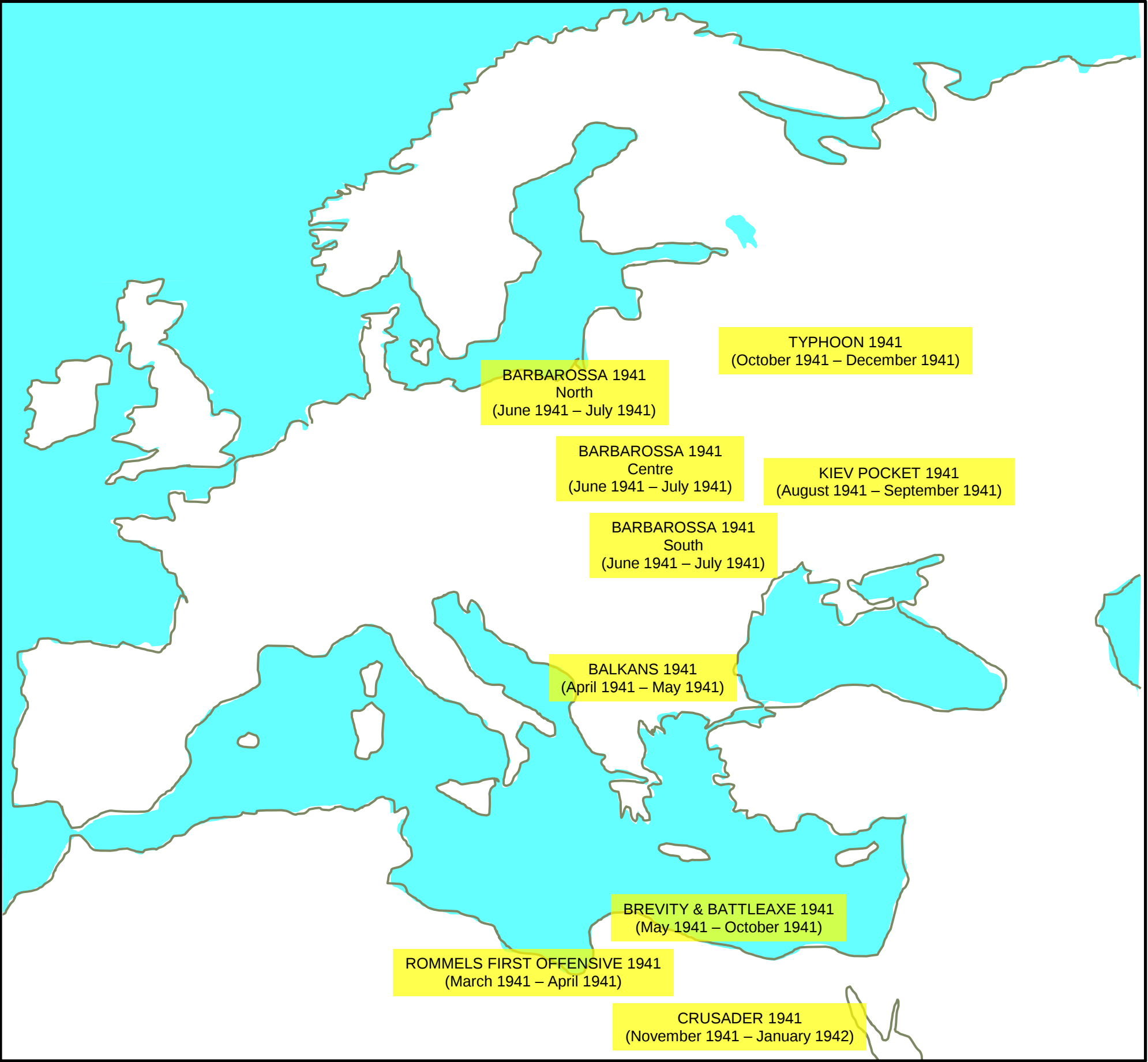
East Front 1940: Russian attacks Germany in the east. Russia 1940: The west does not enter the war and German invades Russia. Egypt 1940: The Italians launch a more aggressive advance into Egypt.



1941

Optional Conflicts

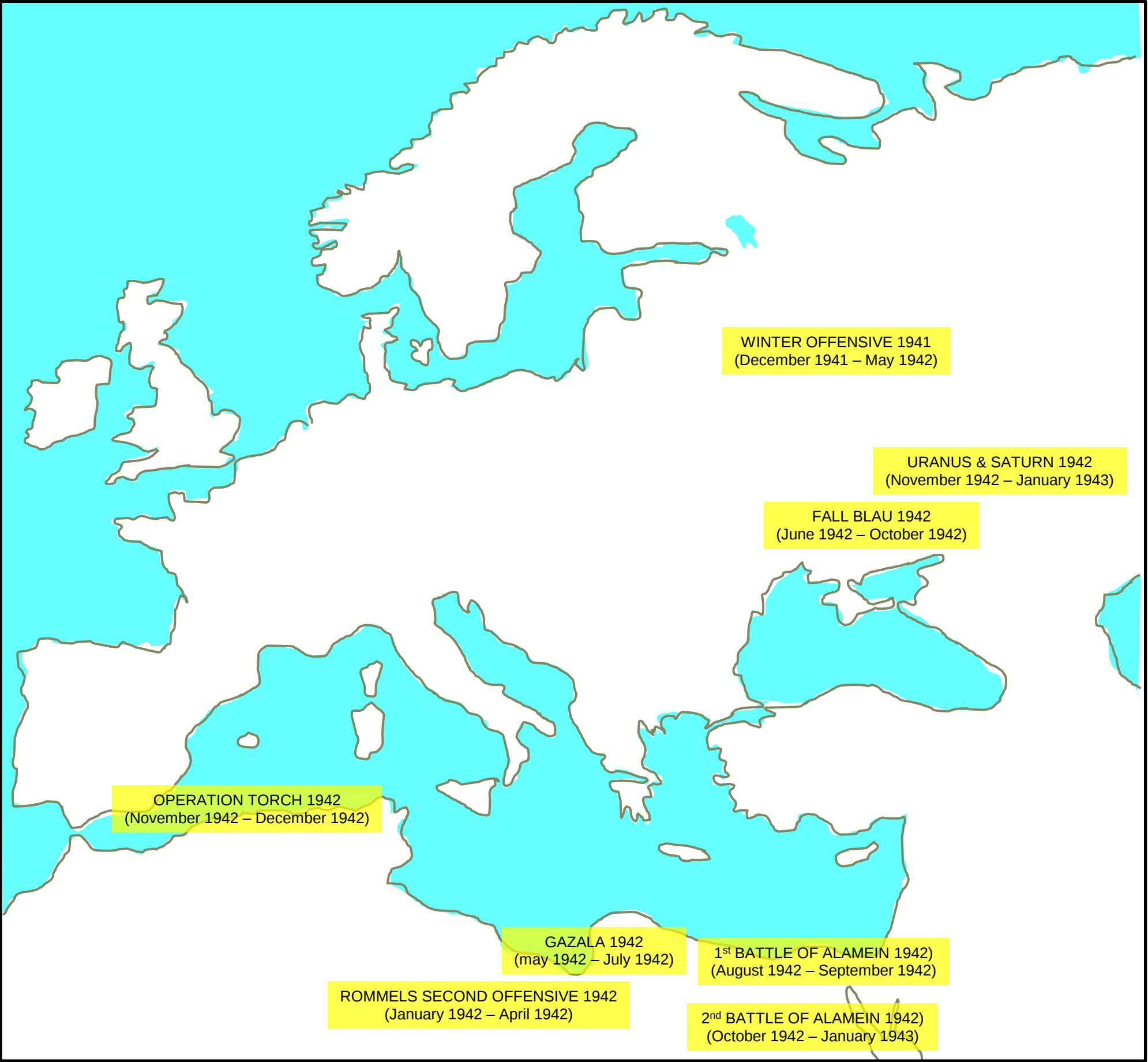
Turkey 1941: Germany invades Turkey. Spain 1941: Germany attacks Spain. Sweden 1941: Germany attacks Sweden. North Africa 1941: Britian invaded Vichy North Africa (amphibious)



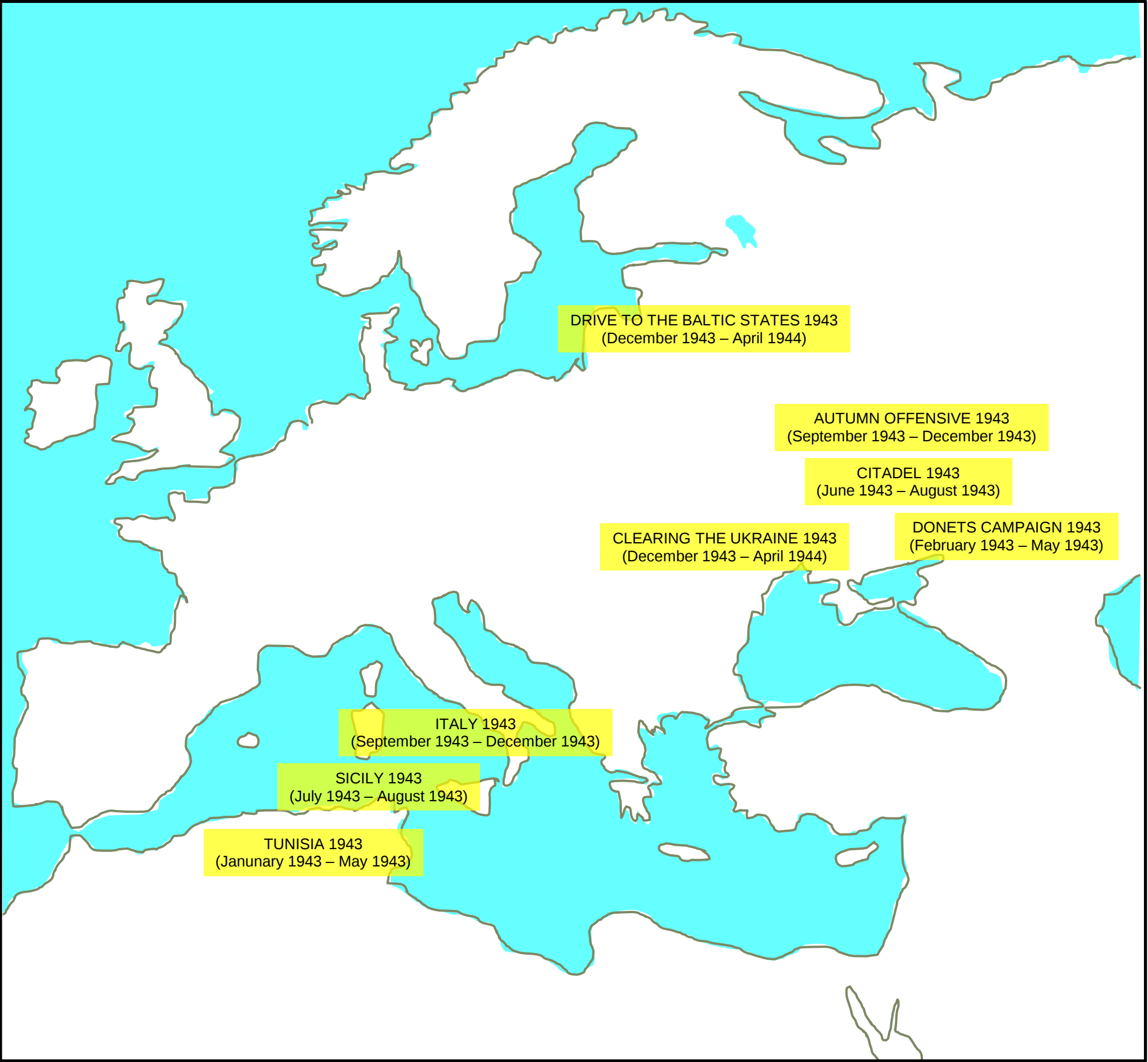
1942

Optional Conflicts

France 1942: Western allies land in France. Spain 1942: western allies invade Spain.



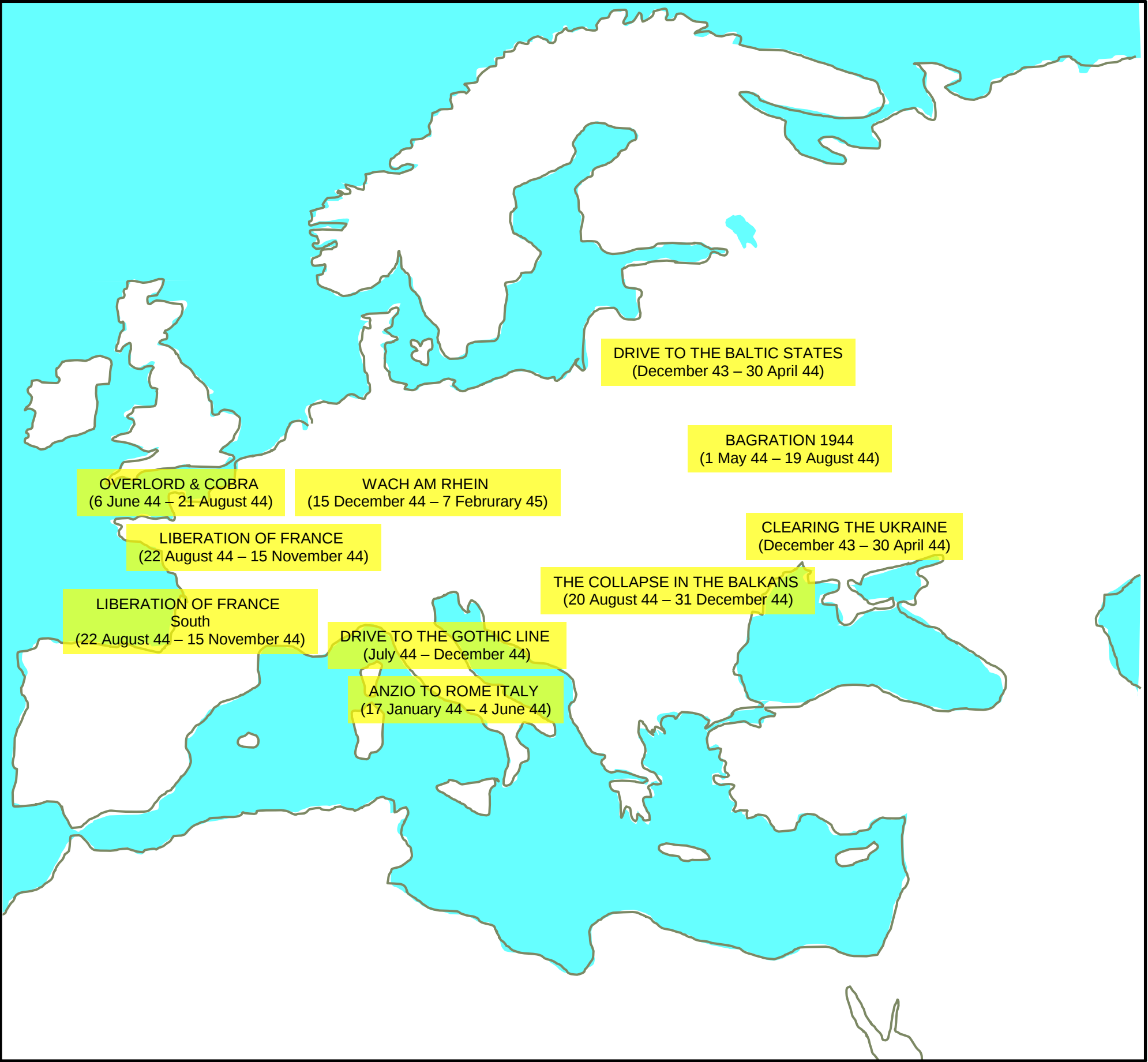
1943



1944

Optional Conflicts

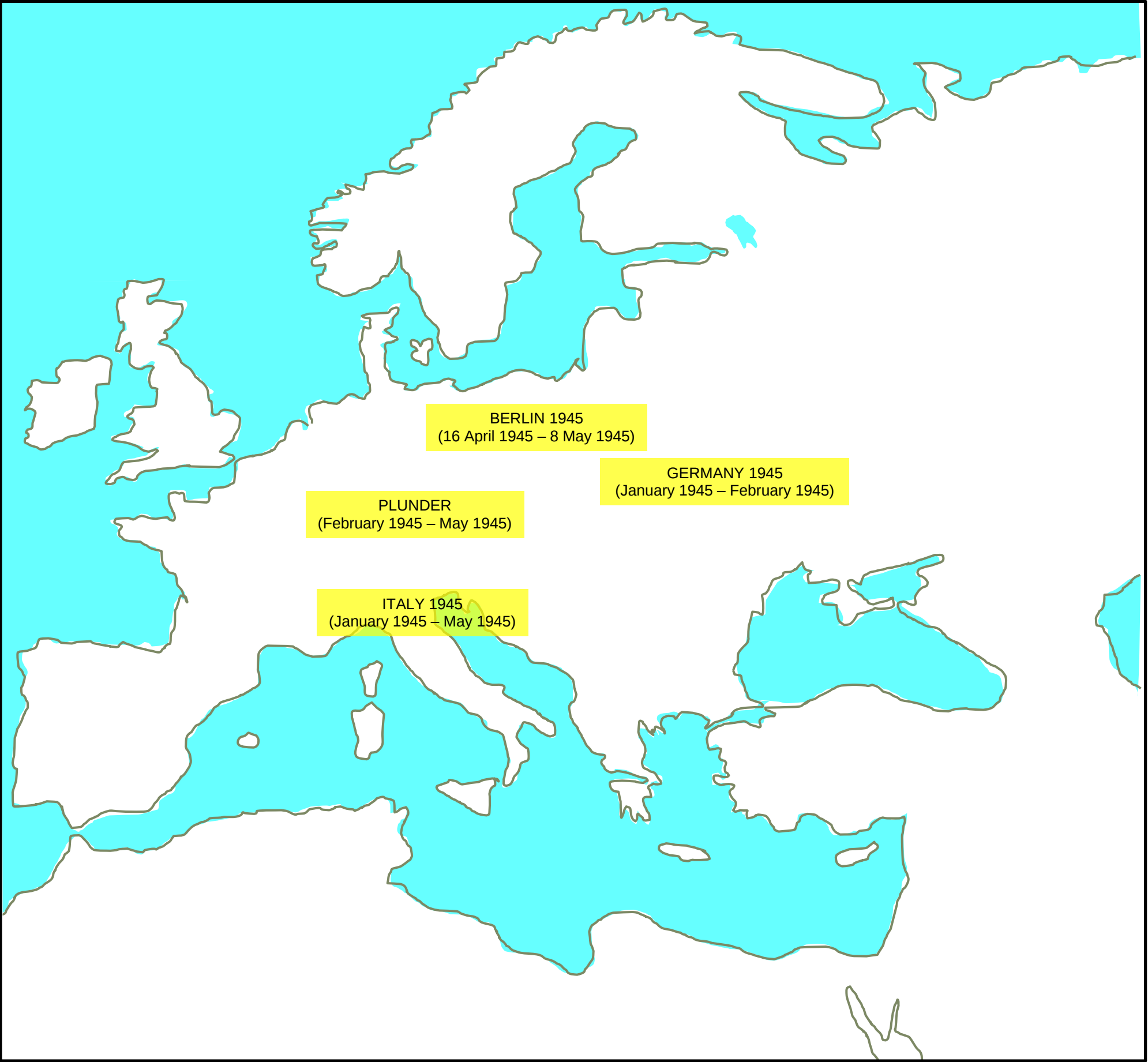
Greece 1944: Western allies invade Greece.



1945

Optional Conflicts;

East v west : Soviets and western allies engage in conflict.



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U.S. Army Order of Battle ETO	W.V. Madejre.

Links

Corps Commander	https://groups.yahoo.com/neo/groups/corps_commander/info
Korps Commander	https://groups.yahoo.com/neo/groups/corps_commander/info

Corps Commander (Training Video)

<https://www.youtube.com/watch?v=fPpldgailYc&list=PLSEuHTEyqSxu1jcdmLMsLRd2ECsM-0t1v>

Corps Commander	https://groups.io/g/Corps-Commander
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LWRS	https://groups.yahoo.com/neo/groups/lwrs/info
Bewegungskrieg	https://groups.io/g/Bewegungskrieg





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